



# October Revision

**Mr. Ahmed Elbasha**

✱ (1) Write the scientific term:

- 1) A property that helps animals to blend in with their surrounding Environment (.....)
- 2) A plant lives in wet land habitat and has wide leaves to absorb a large amount of sunlight. (.....)
- 3) The organ where saliva moistens the food (.....)
- 4) It presents in mouth and play an important role in crushing of food (.....)
- 5) Liquid substance in your mouth that moistens the bite of food and begins to break it down (.....)
- 6) An organ through which solid wastes of digestion leaves the body (.....)
- 7) A process through which the body gets oxygen from the air and expels out carbon dioxide (.....)
- 8) A large muscle that contracts during breathing in and relaxes during breathing out (.....)
- 9) A structure that allows fish to breathe under water (.....)
- 10) A gas that presents in air and water and is very important for breathing process. (.....)
- 11) A gas which the human and fish bodies must get rid of during exhalation process (.....)
- 12) The environment in which fish live, and as it is clean the fish stay healthy. (.....)
- 13) A gas that is present in water and air, and supply amphibians with energy. (.....)
- 14) The type of adaptation that allows frog to take in oxygen gas from water directly through the skin (.....)

- 15) An organ that is responsible for breathing and contains little sacs, in humans, frogs, cows but not in fish. (.....)
- 16) A property related to the bouncing back of sound to the dolphin when the sound waves hit objects under water (.....)
- 17) The organ used to differentiate between different colors (.....)
- 18) The organ used to differentiate between different types of food (.....)
- 19) The organ used to differentiate between different scents. (.....)
- 20) The sense used to differentiate between smooth and rough surfaces (.....)
- 21) A system that controls all the body functions, and nerves are one of its parts. (.....)
- 22) An organ composed of a group of nerves located in the backbone, and sends messages from and to the brain (.....)
- 23) They include the eyes, nose, ears, tongue, and skin, and they receive information from the surroundings and send it to the brain (.....)
- 24) A type of nerves in the sensory organs that is responsible for receiving information from the environment (.....)
- 25) The time taken by an organism's body to respond to different reactions around it (.....)
- 26) A system that works inside the human body such that it keeps the organism away from danger (.....)
- 27) The organ which receives and processes the messages sent from the sensory receptors that are found in a jerboa's ears. (.....)
- 28) An organ in the human body that can distinguish between the smell of vinegar and perfume. (.....)
- 29) A sense by which you can recognize the sour taste of lemon (.....)

**★(2) Complete the following:**

1. Among animals that can live in polar environment are ..... and .....
2. Among animals that live in hot environments are ..... foxes, while .....  
foxes live in cold environments
3. Different colors in bull shark's body is considered ..... adaptation
4. The chance of bull shark to find a prey is easier in ..... water than in .....  
water.
5. Among the plants that can survive in habitats that have lackage of water are .....,  
..... and .....
6. The human body use ..... system to get nutrients from food and use .....  
system to get oxygen from air.
7. The role of saliva in digestion process is digestion of .....
8. Longest part of digestive system where digestion takes place inside it is .....
9. Air enters and exits the human body through ..... system
10. Slow changes to ecosystem done by nature, while rapid changes done by .....
11. Dolphins have sharp sense of .....
12. The system which is responsible for moving your hand away when you touch a cup of  
hot water is the ..... system

**✱(3) Choose the right answer :**

**1. The presence of an insulating layer of ..... , keep the penguin 's body warm.**

- a. protein and thick downy feathers
- b. fat and thin downy feathers
- c. fat and thick downy feathers
- d . protein and thin downy feathers

**2. Ecosystem is .....**

- a. a type of adaptation.
- b. one of human body systems.
- c. a habitat in which living organisms live.
- d. a characteristic that helps living organisms survive.

**3. Camouflage means that the animal .....**

- a. can be seen easily among its surrounding.
- b. is hard to be seen among its surrounding.
- c. is easily to be seen by its preys.
- d. can be seen easily by its predators.

**4. When we wear heavy clothes in winter, this is considered as a type of .....**

- a. adaptation for cold weather.
- b. camouflage.
- c. adaptation for hot weather.
- d. ecosystem.

**5. The color of fur of fennec foxes protects them from .....**

- a. wind.
- b. rains.
- c. hot Sun.
- d. cold weather.

**6. Bull sharks can live in .....**

- a. fresh water only.
- b. salt water only.
- c. seas, rivers and mud.
- d. rivers, seas and oceans.

**7. .... is considered as a behavioral adaptation in the panther chameleon.**

- a. Puffing up its body during danger
- b. Each eye can move independently
- c. V-shaped feet
- d. Long sticky tongue

**8. From the behavioral adaptation of acacia tree is that.....**

- a. it has one very long root.
- b. it has sharp spines among its leaves.
- c. it has very tall trunk.
- d. it is producing poison to make a bad tasty leaves.

**9. The acacia tree warning the other nearby acacia trees from animals by sending**

- a. a watery message in the air.
- b. a watery message in the water.
- c. a smelly message in the air.
- d. a smelly message in the water.

**10. The roots of kapok tree are not planted deeply in the soil, because .....**

- a. the soil contains less water.
- b. the soil contains more water.
- c. the climate is very cold.
- d. the climate is very hot.

**11. Barbary fig keeps animals away like acacia trees by its .....**

- a. sharp spines.
- b. poison.
- c. smell.
- d. long leaves.

**12. The needed energy to perform different functions of a living organism is obtained from .....**

- a. breathing only.
- b. food processing only.
- c. breathing and running.
- d. breathing and food processing.

**13. All the following are organs in the digestive system except .....**

- a. mouth.
- b. nose.
- c. stomach.
- d. esophagus.

**14. The stomach lies between esophagus and .....**

- a. mouth.
- b. large intestine.
- c. small intestine.
- d. anus.

**15. Which of the following organs is not included in breaking down of food? .....**

- a. Mouth.
- b. Stomach.
- c. Lungs.
- d. Small intestine.

**16. The role of teeth in digestion process is .....**

- a. mixing the food.
- b. crushing the food.
- c. swallowing the food.
- d. moistening the food.

**17. Crushing the food in your mouth is a function of .....**

- a. stomach.
- b. tongue.
- c. saliva.
- d. teeth.

**18. All the following are correct about the mouth except .....**

- a. it is the first organ in the digestive system.
- b. it has teeth.
- c. it has tongue.
- d. it moves food to the stomach directly.

**19. In the ....., saliva moistens food and begins to break it down.**

- a. mouth
- b. esophagus
- c. small intestine
- d. stomach

**20. Saliva in the mouth makes the food becomes soft and mushy with the help of .....**

- a. teeth only.
- b. tongue only.
- c. teeth and esophagus.
- d. teeth and tongue.

**21. The organ that moves the food into the stomach is .....**

- a. mouth.
- b. tongue.
- c. esophagus.
- d. small intestine.

**22. The food passes from the stomach to ..... in order to complete the digestion process.**

- a. esophagus
- b. small intestine
- c. large intestine
- d. anus

**23. The stomach mixes the food with .....**

- a. digestive juices only.
- b. stomach acid only.
- c. saliva and digestive juices.
- d. stomach acid and digestive juices.

**24. The acid present in the stomach helps in .....**

- a. absorption of digested food quickly.
- b. digestion of food.
- c. absorption of water from undigested food.
- d. crushing of food.

**25. The liver and ..... pour their juices into the small intestine.**

- a. throat
- b. esophagus
- c. large intestine
- d. pancreas

**26. Juices from liver and pancreas flow into .....**

- a. mouth.
- b. stomach.
- c. small intestine.
- d. large intestine.

**27. An Organ that is long tube its length is about more than six meters is called .....**

- a. large intestine.
- b. small intestine.
- c. esophagus.
- d. stomach.

**28. The undigested materials of the food pass from the small intestine into .....**

- a. the liver.
- b. the pancreas.
- c. the brain.
- d. the large intestine.

**29. In the large intestine ..... is absorbed from the undigested food.**

- a. starch
- b. fats
- c. water
- d. oil

**30.The solid wastes of undigested food become useless to the body, so the body must expel it outside the body through the .....**

- a. mouth.
- b. small intestine.
- c. large intestine.
- d. anus.

**31.The following pieces of advice keep the digestive system healthy except .....**

- a. chewing food well.
- b. avoid eating much fast meals.
- c. drinking a little amount of water.
- d. practicing sports regularly.

**32.The oxygen gas moves from air into blood at the .....**

- a. nose.
- b. throat.
- c. trachea.
- d. lungs.

**33.Changes that occur slowly to the environment, .....**

- a. cause many organisms to die.
- b. cause many organisms to respire.
- c. cause many organisms to disappear.
- d. give a chance to the organisms for adaptation.

**34.Rapid changes that occur to the ecosystem, done by .....**

- a. arctic foxes.
- b. starred agama.
- c. human activities.
- d. animal activities.

**35.Human can negatively affect the nature by all of the following activities, except .....**

- a. cutting down forests.
- b. throwing wastes in waterways.
- c. plowing grasslands.
- d. removing air pollutants .

**36.Human activities and bad habits can pollute ..... of an ecosystem.**

- a. air and soil only
- b. soil and waterways only
- c. air and waterways only
- d. air, soil and waterways

**37.Pollution of an ecosystem, can affect .....**

- a. plants and animals only.
- b. animals and humans only.
- c. humans and plants only.
- d. plants, animals and humans.

**38.If an ecosystem is severely polluted, some animals can survive .....**

- a. by increasing the rate of breathing .
- b. by decreasing the rate of breathing.
- c. by increasing the rate of heart beats.
- d. by moving to another suitable ecosystem.

**39. The sensory organs of a dolphin help it do all of the following, except .....**

- a. surviving.
- b. searching for food.
- c. searching for water.
- d. protecting itself under water.

**40. To describe the delicious taste of a piece of chocolate, we should use the sense of .....**

- a. sight.
- b. smell.
- c. taste.
- d. touch.

**41. To describe color of your school bag to your friend, you should use the sense of .....**

- a. sight.
- b. smell.
- c. taste.
- d. touch.

**42. Which of the following senses we use during watching a film on the T.V? .....**

- a. Sight and taste.
- b. Sight and smell.
- c. Hearing and touch.
- d. Sight and hearing.

**43. The five senses of humans include .....**

- a. sight, hearing, touch, smell, and movement.
- b. sight, movement, taste, touch, and smell.
- c. taste, touch, movement, hearing, and smell.
- d. sight, hearing, taste, smell, and touch.

**44. To know if a cup of water is hot or cold, we need to use the sense of .....**

- a. sight.
- b. hearing.
- c. smell.
- d. touch.

**45. We can distinguish between water and milk through .....**

- a. taste and hearing.
- b. sight and hearing.
- c. smell and hearing.
- d. taste and sight.

**46. The senses upon which you depend to hold a small radio playing at low volume in a dark room are .....**

- a. hearing and smell.
- b. touch and taste.
- c. smell and taste.
- d. hearing and touch.

**47. The brain, as the control centre of the nervous system, can deal with ..... at the same time.**

- a. two senses only
- b. three senses only
- c. four senses only
- d. all the five senses

**48. Some animals go out at night in their habitats to .....**

- a. search for air.
- b. search for a predator.
- c. search for a prey.
- d. sleep in the open air.

**49. Both the spinal cord and nerves .....**

- a. are located in the backbone.
- b. are located in the small intestine.
- c. transmit messages from the brain to all parts of the body only.
- d. transmit messages from the brain to all parts of the body and vice versa.

**50. All of the following are sensory organs except the .....**

- a. eyes.
- b. nose.
- c. skin.
- d. lungs.

**51. The nerves transmit information from and to the brain in the form of .....**

- a. magnetic impulses.
- b. electrical impulses.
- c. light impulses.
- d. sound impulses.

**52. The organ that processes the information collected through the sense of sight is .....**

- a. the spinal cord .
- b. the nerves.
- c. the brain.
- d. the eyes.

**53. The system responsible for moving your hand away from danger, such as touching a hot cup of tea, is the ..... system.**

- a. digestive
- b. respiratory
- c. nervous
- d. urinary

**54. The shorter the reaction time, the .....**

- a. faster the prey can run away from the predator.
- b. faster the predator can catch the prey.
- c. longer the time taken by the prey to detect the presence of a predator.
- d. less chance the prey survives.

**55. The reaction time is always .....**

- a. less than one second.
- b. about four minutes.
- c. about three minutes.
- d. about two minutes.

**\*(4) Put ( √ ) or ( X )**

1. Living organisms can survive and reproduce in different environments by the help of adaptation (    )
2. Camouflage helps animals adapt extreme weather conditions in their ecosystems (    )
3. Living organisms can adapt their environmental conditions through structural adaptation and behavioral adaptation. (    )
4. All types of sharks live in fresh water. (    )
5. Chameleon uses its tail and V-shaped feet to hunt and move (    )
6. If a bull shark moves from a river to a sea, it will die (    )
7. Water lily has wide leaves to absorb a large amount of sunlight. (    )
8. Animals can't eat barbary fig due to its sharp spines. (    )
9. All animals are similar in shape and structure of their digestive systems. (    )
10. The human body gets oxygen gas from food. (    )
11. Mouth, nose, esophagus and the stomach are from organs of the digestive system. (    )
12. The food passes through the large intestine before it goes into the small intestine. (    )
13. Digestion process begins in stomach with the help of saliva. (    )
14. Tongue and teeth moisten food, while saliva crushes the food until it becomes soft. (    )
15. Food passes from mouth to stomach through a tube known as small intestine. (    )
16. Food usually stays in stomach for few hours until it becomes a soupy liquid (    )
17. Stomach connects esophagus with large intestine. (    )
18. The food gets broken down into nutrients in the small intestine. (    )
19. Swallowing food without chewing keeps the digestive system healthy (    )
20. Digestive system ends by anus. (    )
21. Dogs eat meat which is easy to be digested, so dogs have short digestive system. (    )
22. During running the rate of breathing decreases. (    )
23. The air travels down into the lungs through esophagus. (    )
24. Inhaled air is rich in carbon dioxide gas, while exhaled air is rich in oxygen gas. (    )
25. Exposing to air rich in dust harms the respiratory system. (    )

26. As human needs clean water to drink, fish needs clean air to breathe. ( )
27. Organisms have no chance to adapt, if the environmental changes are rapidly. ( )
28. Nature cannot change an ecosystem rapidly. ( )
29. Pollution is one of the most dangerous problems, that affect all living organisms. ( )
30. The sense of smell is super in all animals ( )
31. The body can respond to more than one external stimulus at the same time. ( )
32. The brain responds to the auditory stimulus faster than the visual stimulus. ( )
33. The response to a danger begins with sensory receptors. ( )
34. Reaction time should be as long as possible so an animal can think how to run away from a danger. ( )
35. Different body muscles play an important role in completing the response to danger and running away from it. ( )

### ★(5) TRY TO ANSWER:

1. Look at the opposite figure, then answer the following questions:

a. Give two examples of animals that live in this habitat.

.....  
 .....

b. Give two examples of plants that live in this habitat.

.....  
 .....



c. Put (✓) or (X):

1. Plants of this habitat are characterized by having long, thick roots. ( )  
 2. Plants of this habitat have large, wide leaves. ( )

2. Choose from column (A), what suits it in column (B) and (C) :

Species	Habitat	Way of breathing
1. Lizard	A. Polar region	a. Take in oxygen from air.
2. Fish	B. Desert	b. Take in oxygen from water.
3. Penguin	C. Water	c. Take in oxygen from air and water.

1. .... → ..... 2. .... → ..... 3. .... → .....

3. Write one animal and one plant that live in each environment of the following:

Environment	Animal	Plant
1. Desert :	.....	.....
2. Rainfall forest :	.....	.....
3. Polar reigon :	.....	.....
4. Salt water :	.....	.....

#### 4. Observe the following figure, then choose the correct answer :

1. Arrow number (1) represents .....

- a. sound waves produced by the dolphin.
- b. the echo bounced back from the rocky object.
- c. light waves produced by the dolphin.
- d. light waves produced by the rocky object.

2. Arrow number (2) represents .....

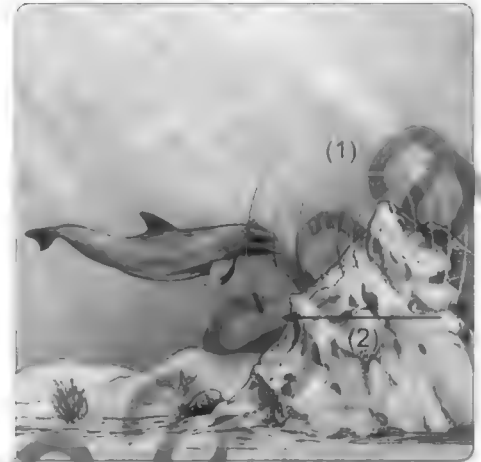
- a. sound waves produced by the dolphin.
- b. the echo bounced back to the dolphin.
- c. light waves produced by the dolphin.
- d. light waves bounced back to the dolphin.

3. The dolphin uses this property to .....

- a. see objects underwater.
- b. see objects above the water surface.
- c. locate objects and living organisms on the beach.
- d. locate objects and living organisms under water.

4. The sense used by the dolphin in this picture is the .....

- a. smell.
- b. taste.
- c. hearing.
- d. sight.



#### 5. Look at the opposite figure that shows the structure of the human nervous system, then answer the questions:

1. Which part spreads all around the human body ?

.....

.....

2. Which part is found inside the backbone of the human body ?

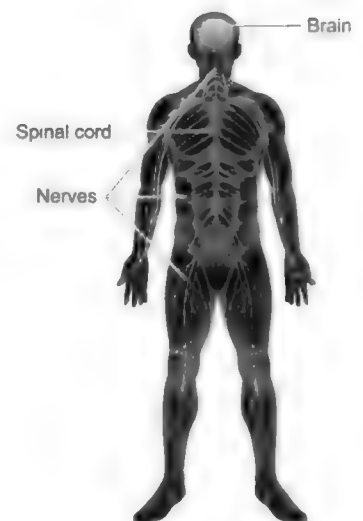
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3. Which part represents the main control center in the human body ?

.....

.....



## 6. Look at the opposite figure, then answer the questions below:

- What does the figure represent?

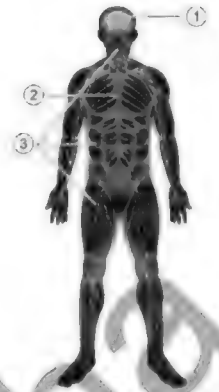
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- Label the figure:

1. -----

2. -----

3. -----



### Complete:

1. Number (-----) is found inside the backbone of the human body.
2. Number (-----) represents the main control center in the human body.
3. Number (-----) spreads all around the human body parts.

## 7. Choose from column (B) what suits it in column (A) :

(A)	(B)
1. Sensory receptors	a. It is the main control centre in an animal body.
2. Nerves	b. They are electrical impulses that reach the brain.
3. Brain	c. It is found in the backbone and transmit messages from and to the brain.
4. Spinal cord	d. They are found on the sensory organs, and the first to sense the surrounding environment.
	e. They receive information from the sensory receptors.

1. ....

2. ....

3. ....

4. ....

## Model Answer

### ✱ (1) Write the scientific term:

- |                     |                           |                     |                       |
|---------------------|---------------------------|---------------------|-----------------------|
| 1. Camouflage.      | 9. Gills                  | 16. Echolocation.   | 24. Sensory receptors |
| 2. Water lily plant | 10. Oxygen gas            | 17. Eyes.           | 25. Reaction time     |
| 3. Mouth.           | 11. Carbon dioxide gas    | 18. Tongue.         | 26. Nervous system    |
| 4. Teeth.           | 12. Water                 | 19. Nose.           | 27. Brain             |
| 5. Saliva.          | 13. Oxygen gas.           | 20. Touch.          | 28. Nose              |
| 6. Anus.            | 14. structural adaptation | 21. Nervous system. | 29. Taste             |
| 7. Respiration.     | 15. lungs.                | 22. Spinal cord.    |                       |
| 8. Diaphragm.       |                           | 23. Sense organs.   |                       |

### ✱ (2) Complete the following:

- |   |                       |
|---|-----------------------|
| 1. penguin - polar bear                         | 7. starch             |
| 2. fennec - arctic                              | 8. small intestine.   |
| 3. structural                                   | 9. Respiratory        |
| 4. fresh - salt                                 | 10. humans activities |
| 5. acacia tree - Palm tree - barbary fig plant. | 11. hearing           |
| 6. digestive - respiratory                      | 12. nervous           |

### ✱ (3) Choose the right answer :

- |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 1. C  | 11. A | 21. C | 31. C | 41. A | 51. B |
| 2. C  | 12. D | 22. B | 32. D | 42. D | 52. C |
| 3. B  | 13. B | 23. D | 33. D | 43. D | 53. C |
| 4. A  | 14. C | 24. B | 34. C | 44. D | 54. A |
| 5. C  | 15. C | 25. D | 35. D | 45. D | 55. A |
| 6. D  | 16. B | 26. C | 36. D | 46. D |       |
| 7. A  | 17. D | 27. B | 37. D | 47. D |       |
| 8. D  | 18. B | 28. D | 38. D | 48. C |       |
| 9. C  | 19. A | 29. C | 39. C | 49. D |       |
| 10. B | 20. D | 30. D | 40. C | 50. D |       |

### ✱ (4) Put (✓) or (X)

- |        |         |         |         |         |         |
|--------|---------|---------|---------|---------|---------|
| 1. (✓) | 7. (✓)  | 13. (X) | 19. (X) | 25. (✓) | 31. (✓) |
| 2. (X) | 8. (✓)  | 14. (X) | 20. (✓) | 26. (X) | 32. (✓) |
| 3. (✓) | 9. (X)  | 15. (X) | 21. (✓) | 27. (✓) | 33. (✓) |
| 4. (X) | 10. (X) | 16. (✓) | 22. (X) | 28. (✓) | 34. (X) |
| 5. (✓) | 11. (X) | 17. (X) | 23. (X) | 29. (✓) | 35. (✓) |
| 6. (X) | 12. (X) | 18. (✓) | 24. (X) | 30. (X) |         |

★(5) TRY TO ANSWER:

1	(A) Starred agama lizard and fennec Fox. (B) Palm tree and barbary fig plant. (C) 1. (✓)      2. (✗)	5	1. Nerves. 2. Spinal cord. 3. Brain.
2	1. B → a 2. C → b 3. A → a	6	• The nervous system. • ① Brain.      ② Spinal cord. ③ Nerves. • 1. (2)      2. (1)      3. (3)
3	1. Animal → starred agama. plant → Barbary fig 2. Animal → panther chameleon plant → kapok tree 3. Animal → penguin plant → pine tree 4. Animal → Bull shark plant → Mangrove tree	7	1. d    2. e    3. a    4. c
4	1. a.    2. b    3. d    4. c.		



# November Revision

**Mr. Ahmed Elbasha**

✱ (1) Write the scientific term:

- 1) Animals that have spectacular night vision, on which they depend on to hunt. (.....)
- 2) A tiny monkey, its length is about 10 centimeters long. (.....)
- 3) The visible form of energy, that enable us to see. (.....)
- 4) The organ of vision, which receives light that reflected from the surrounding objects (.....)
- 5) The structural adaptation that gives fishing cat excellent night vision (.....)
- 6) Materials that allow light to pass through (.....)
- 7) Materials that we cannot see through it. (.....)
- 8) A transparent material, that surrounds us everywhere and we use it in breathing. (.....)
- 9) The person who tests our eyes to detect whether its lens is focusing properly or not (.....)
- 10) A type of beetles that produce flashlight using their wings. (.....)
- 11) An ancient Egyptian language created for writing and included 700 symbols (.....)
- 12) A season in which the humpback whale produces high-pitched sound. (.....)
- 13) A season in which the humpback whale produces low-pitched sound. (.....)
- 14) Pitched sounds which travel in cold water better than in warm water (.....)
- 15) Pitched sounds which travel in warm water better than in cold water. (.....)

- 16) Sense organ that can detect sound energy ( ..... )
- 
- 17) Sense organ that can detect light energy ( ..... )
- 
- 18) A communication system developed by Samuel Morse in the 19th century. ( ..... )
- 
- 19) The short beeps in Morse code. ( ..... )
- 
- 20) The long beeps in Morse code. ( ..... )
- 
- 21) The sense that has a problem with the blind person ( ..... )
- 

✱(2) Complete the following:

1. Tarsier and owl have huge ..... , while ..... has a mirror-like membrane in its eyes to reflect light.
2. Some nocturnal animals have a mirror-like membrane on the back of their eyes called .....
3. Tapetum lucidum helps some animals have an spectacular night vision which is considered ..... adaptation.
4. Light travels in ..... line.
5. Light and sound travel in the form of .....
6. Objects that light can't pass through are called ..... ,while objects that allow light to pass through are called .....
7. A tree forms a shadow as it is an ..... object that don't allow ..... to pass through.
8. Cloth and paper are considered ..... surfaces that scatter or diffuse ..... energy.
9. Fireflies use ..... energy in their communication, while dolphins and whale use ..... energy to communicate with each other.

**☀(3) Choose the right answer :**

**1. All the following things are considered as a light source, except .....**

- a. the Sun.                      b. fire.                      c. eyes.                      d. the light lamp.

**2. .... energy affects the sensory receptors in eyes of living organisms causing vision.**

- a. Electric                      b. Sound                      c. Heat                      d. Light

**3. To know what you are seeing and recognize it, the ..... must receive sensory impulses from eyes.**

- a. spinal cord                      b. brain  
c. sensory receptors in eyes                      d. sensory receptors in ears

**4. All the following are preys for tarsier, except .....**

- a. insects.                      b. penguins.                      c. small lizards.                      d. small birds.

**5. Both tarsier and owl, .....**

- a. can swim.                      b. can fly.  
c. are nocturnal animals.                      d. belong to the same species.

**6. Each of human, fishing cat and tarsier, .....**

- a. has an excellent night vision.                      b. becomes more active at night.  
c. has a mirror-like membrane in its eyes.                      d. has two eyes adapted for vision.

**7. The energy which must present to make our eyes able to see the objects around us, is ..... energy.**

- a. sound                      b. electric                      c. light                      d. magnetic

**8. Fishing cat can see at night, as follows .....**

- a. light falls on the eyes, then reflected to the objects.  
b. light falls on the objects, then reflected into the eyes.  
c. sound falls on the eyes, then reflected to the objects.  
d. sound falls on the objects, then reflected into the eyes.

**9. Both light energy and sound energy, .....**

- a. can be seen.  
b. cannot be seen.  
c. the light energy can be seen, while sound energy cannot be seen.  
d. the sound energy can be seen, while light energy cannot be seen.

**10.The light waves travel in the air as .....**

- a. curved lines.                      b. zigzag lines.                      c. straight lines.                      d. circular lines.

**11.When light rays hit an object, all the following sentences are correct, except .....**

- a. some of rays is absorbed by the object.  
b. some of rays is bounced off the object.  
c. some of rays may go through the object.  
d. some of rays reflects to our ears causing hearing.

**12.When light hits an object, a shadow of this object is formed because v**

- a. light can pass through the object.                      b. light cannot pass through the object.  
c. this object reflects light.                      d. this object is a transparent object.

**13.Opaque material .....**

- a. allows light to pass through.  
b. absorbs some of light that fall on it only.  
c. bounces off some of light that fall on it only.  
d. absorbs some of light that fall on it and bounces off the other.

**14.All the following are transparent objects, except .....**

- a. glass.                      b. water.                      c. paper.                      d. air.

**15.The eye lens redirects the entered light rays, where all redirected rays are collected in ..... on the back of the eye.**

- a. one point                      b. two points                      c. three points                      d. four points

**16.As the eye lens can redirect the entered light rays, so this lens must be .....**

- a. an opaque material.                      b. a transparent material.  
c. a reflecting material.                      d. a mirror-like.

**17.A firefly is not a bird, but it is a type of .....**

- a. amphibians.                      b. lizards.                      c. beetles.                      d. reptiles.

**18.Which of the following is not a reason that fireflies produce a flash light ? .....**

- a . To attract a mate.                      b. For communication.  
c. To warn off predators.                      d. To see in the dark.

**19.Changing the pattern of lighting up in a firefly is an example of ..... adaptation(s).**

- a. structural and behavioral                      b. physical and behavioral  
c. only structural                      d. only behavioral

**20. Different ..... represent different letters of alphabet in Morse code.**

- a. symbols and figures
- b. symbols and dashes
- c. figures and dots
- d. dashes and dots

**21. Morse code consists of ..... beeps known as dots and ..... beeps known as dashes.**

- a. short, short
- b. long, long
- c. short, long
- d. long, short

**22. In Morse code, long flashes can be used instead of .....**

- a. dots only.
- b. dashes only.
- c. both dots and dashes.
- d. neither dots nor dashes.

**23. In Morse code, short flashes can be used instead of .....**

- a. dots only.
- b. dashes only.
- c. both dots and dashes.
- d. neither dots nor dashes.

**24. The way by which bees can communicate with each other is .....**

- a. echolocation.
- b. flashlights.
- c. dancing.
- d. Morse code.

**25. The bee can rotate around itself in the form of number ..... as an encoding message for other bees.**

- a. 2
- b. 4
- c. 6
- d. 8

**26. Bats use their ..... to get information about their surroundings in the dark.**

- a. nose
- b. tongue
- c. eyes
- d. ears

**27. Echolocation is the use of ..... -pitched sounds for finding food.**

- a. medium
- b. low
- c. very low
- d. high

**28. .... use echolocation by bouncing high-pitched sounds in the air.**

- a. Bats
- b. Dolphins
- c. Whales
- d. Snakes

**29. The echo turns into ..... that a blind man can feel in his thumb while holding his special cane.**

- a. vibrations
- b. light
- c. heat
- d. electricity

**★(4) Put ( √ ) or ( X )**

- |   |        |
|---|--------|
| 1. The Moon is not considered as a light source.  | (    ) |
| 2. At night, cats eyes look like small lighted lamps.                                   | (    ) |
| 3. Nocturnal animals include fishing cats, owls, and tarsiers.                          | (    ) |
| 4. Tarsier eats insects, small lizards and small birds.                                 | (    ) |
| 5. Tarsiers, fishing cats, humans and owls have an excellent night vision.              | (    ) |
| 6. Human can see in dim light better than in bright light.                              | (    ) |
| 7. Light is the only form of energy that is needed to see the surroundings.             | (    ) |
| 8. Dogs and cats, all have a mirror-like membrane in their eyes.                        | (    ) |
| 9. Transparent objects includes air, water, polished mirror, glass and lenses.          | (    ) |
| 10. Rough objects tended to reflect light better than smooth objects.                   | (    ) |
| 11. Polished mirror reflects all incoming light rays that fall on it.                   | (    ) |
| 12. We see transparent object, when light rays that passes through it fall on our eyes. | (    ) |
| 13. Air doesn't form shadow, as it is a transparent material.                           | (    ) |
| 14. Person have an excellent vision, if his eyes doesn't focus the light ray properly.  | (    ) |
| 15. Fireflies produce flash light to warn off predators.                                | (    ) |
| 16. Whales can communicate with each other by using songs.                              | (    ) |
| 17. Fireflies are wingless beetles.   | (    ) |
| 18. It is possible for a human to interact with fireflies.                              | (    ) |
| 19. Speaking is the only way to communicate with people.                                | (    ) |
| 20. Animals communicate with each other by using different senses                       | (    ) |
| 21. Fireflies communicate with each other through songs.                                | (    ) |
| 22. Whales communicate with each other through flashing.                                | (    ) |
| 23. Humpback whales produce more than one type of songs.                                | (    ) |
| 24. Humpback whales can sing under water.   | (    ) |
| 25. The voice of man is rough as it has high-pitched sound.                             | (    ) |
| 26. People with special needs use sign language to communicate.                         | (    ) |
| 27. Movement of your head or hand is not a way of communication with your friends.      | (    ) |

## ✱(5) Correct the underlined words :

1. Humans and cats are similar in their seeing ability at nights. ( ..... )
2. Energy that help humans and animals to see, is sound energy. ( ..... )
3. The Moon is one of the light sources in the sky. ( ..... )
4. Nocturnal animals have weak night vision, and also depend on excellent hearing and smelling senses to hunt. ( ..... )
5. Nocturnal animals have smaller eyes than humans ( ..... )
6. Toad is a tiny monkey, that has big eyes and hunt at night. ( ..... )
7. Sound is a visible form of energy, that bounce off objects into our eyes. ( ..... )
8. Eyes send messages to the heart, for processing information ( ..... )
9. In a completely dark room everything look red, due to the absence of light. ( ..... )
10. Tapetum lucidum in nocturnal animals, is considered as behavioral adaptation. ( ..... )
11. If you want to hide from a predator, you have to stand behind a transparent material. ( ..... )
12. We see the objects because of absorbed light rays on our eyes ( ..... )
13. Opaque materials includes water, glass, air and lenses ( ..... )
14. Humpback whales have similar sounds according to the season ( ..... )
15. Humpback whales produce low-pitched sounds in winter. ( ..... )
16. Low-pitched sounds travel better through cold water. ( ..... )
17. The voice of woman is soft as it has low-pitched sound. ( ..... )

### ★(6) TRY TO ANSWER:

1

If there is a small green lizard in a place with weak light levels.

Answer the following questions :

- Which of the following animals can see and hunt it ? .....
  - Bat.
  - Snake.
  - Tarsier.
  - Dolphin.
- Which of the following living organisms can hear its quiet movements and hunt it ? .....
  - Snake.
  - Owl.
  - Dolphin.
  - Human.
- If this green lizard stands between some green leaves and don't move completely. Which of the following living organisms can hunt it easily ? .....
  - Owl.
  - Human.
  - Tarsier.
  - Snake.

2

Classify which of the following animals have super sight sense and which of them have super hearing sense.

"Arctic fox – Fishing cat – Dolphin – Tarsier – Bat"

Animals have super sight sense	Animals have super hearing sense
.....	.....
.....	.....
.....	.....

3

Arrange the following statements to show the correct sequence of how humans see different objects :

- ( ..... ) Special nerves in the eyes send messages to the brain.
- ( ..... ) The reflected light travels in a straight line into the eyes.
- ( ..... ) The brain interprets the messages as an image.
- ( ..... ) Light waves bounce off objects around us.

4

Look at the following figures, then answer the questions below :

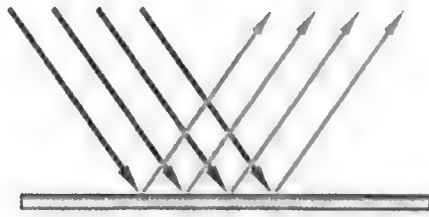


Fig. (a)

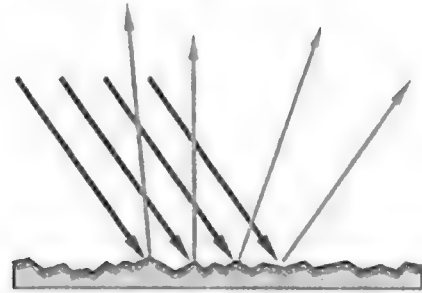


Fig. (b)

**1. Complete :**

a. The surface in fig. (a) is .....

- Because .....

b. The surface in fig. (b) is .....

- Because .....

c. In two figures the falling and reflected rays shows that light travels in ..... line.

**2. Choose:**

The surface in fig. (a) may be .....

a. plastic.

b. wood.

c. mirror.

d. glass.

5

Classify the following materials into smooth materials and rough materials

"Piece of cloth - Mirror - Wood - Metal - Paper "

Smooth materials	Rough materials
.....	.....
.....	.....
.....	.....

6

Classify the following materials into opaque objects and transparent objects :

"Wood -Air - Water - Metal - Lenses"

Opaque objects	Transparent objects
.....	.....
.....	.....
.....	.....

7

Answer the following questions by using the following words (you may use each word many times).

(Human - Fishing cat - Owl - Chameleon)

1. Which of them can make camouflage adaptation ?
2. Which of them has tapetum lucidum layer?
3. Which of them can move its head in all directions to see its prey ?
4. Which of them can use a night vision goggles to see at nighttime ?

8

Write the senses that used in this type of communication in front each sentence in the following table :

Type of communication	The used senses
1. Watching TV.	.....
2. Flashing lights of fireflies.	.....
3. Echolocation in dolphins.	.....
4. Using the cell phone.	.....

9

Look at the following figures, then complete the following sentences :

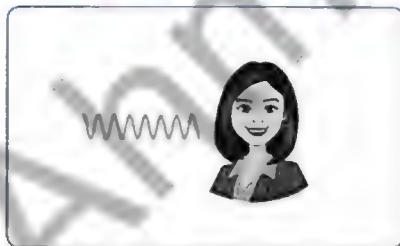


Figure (1)

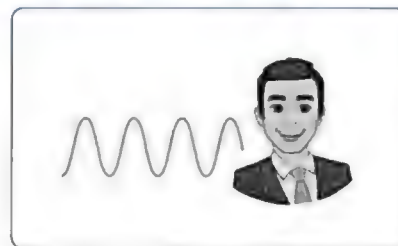


Figure (2)

1. Low-pitched sound is produced from the human in figure ( ..... ).
2. High-pitched sound is produced from the human in figure ( ..... ).
3. The voice that is produced in figure ( ..... ) is like the voice of whales in summer season.
4. The voice that is produced in figure( ..... ) is like the voice of whales in winter season.
5. The voice in figure( ..... ) travels better through cold water.
6. The voice in figure( ..... ) travels better through warm water.

## Model Answer

### ✱ (1) Write the scientific term:

- |                          |                          |                         |
|--------------------------|--------------------------|-------------------------|
| 1. Nocturnal animals.    | 8. Air                   | 15. Low - pitched sound |
| 2. Tarsier.              | 9. Optometrist.          | 16. Ear.                |
| 3. Light.                | 10. Fireflies.           | 17. Eye.                |
| 4. Eyes.                 | 11. Hieroglyphics.       | 18. Morse Code          |
| 5. Tapetum lucidum.      | 12. Winter.              | 19. Dots                |
| 6. Transparent materials | 13. Summer.              | 20. Dashes.             |
| 7. Opaque materials      | 14. High - pitched sound | 21. Sight.              |

### ✱ (2) Complete the following:

- |                        |                         |
|------------------------|-------------------------|
| 1. eyes - fishing cat. | 6. opaque – transparent |
| 2. tapetum lucidum     | 7. opaque - the light   |
| 3. structural          | 8. rough – light        |
| 4. Straight            | 9. light – sound        |
| 5. waves.              |                         |

### ✱ (3) Choose the right answer :

- |      |       |       |       |       |
|------|-------|-------|-------|-------|
| 1. C | 7. C  | 13. D | 19. D | 25. D |
| 2. D | 8. B  | 14. C | 20. D | 26. D |
| 3. B | 9. C  | 15. A | 21. C | 27. D |
| 4. B | 10. C | 16. B | 22. B | 28. A |
| 5. C | 11. D | 17. C | 23. A | 29. A |
| 6. D | 12. B | 18. D | 24. C |       |

### ✱ (4) Put ( ✓ ) or ( X )

- |          |           |           |           |           |
|----------|-----------|-----------|-----------|-----------|
| 1. ( ✓ ) | 7. ( ✓ )  | 13. ( ✓ ) | 19. ( X ) | 25. ( X ) |
| 2. ( ✓ ) | 8. ( ✓ )  | 14. ( X ) | 20. ( ✓ ) | 26. ( ✓ ) |
| 3. ( ✓ ) | 9. ( X )  | 15. ( ✓ ) | 21. ( X ) | 27. ( X ) |
| 4. ( ✓ ) | 10. ( X ) | 16. ( ✓ ) | 22. ( X ) |           |
| 5. ( X ) | 11. ( ✓ ) | 17. ( X ) | 23. ( ✓ ) |           |
| 6. ( X ) | 12. ( X ) | 18. ( ✓ ) | 24. ( ✓ ) |           |

### ✱ (5) Correct the underlined words :

- |                  |                |                           |
|------------------|----------------|---------------------------|
| 1. Different     | 7. Light       | 13. Transparent materials |
| 2. light energy. | 8. Brain       | 14. Different             |
| 3. Sun           | 9. Black       | 15. summer.               |
| 4. Strong        | 10. Structural | 16. High                  |
| 5. Bigger        | 11. an opaque  | 17. High                  |
| 6. Tarsier       | 12. reflected  |                           |

# \*(6) TRY TO ANSWER:

1	1. c      2. b      3. d										
2	<table> <tr> <th>Animals have super sight sense</th><th>Animals have super hearing sense</th></tr> <tr> <td>- Fishing cat. - Tarsier.</td><td>- Arctic fox. - Dolphin. - Bat.</td></tr> </table>	Animals have super sight sense	Animals have super hearing sense	- Fishing cat. - Tarsier.	- Arctic fox. - Dolphin. - Bat.						
Animals have super sight sense	Animals have super hearing sense										
- Fishing cat. - Tarsier.	- Arctic fox. - Dolphin. - Bat.										
3	(1) Light waves bounce off ..... (2) The reflected light travels ..... (3) Special nerves in the eyes ..... (4) The brain interprets .....										
4	1. a. smooth surface. - The rays are reflected at the same angle at which they strike the object originally. b. rough surface. - The rays are reflected in different directions. c. straight. 2. c										
5	<table> <tr> <th>Smooth materials</th><th>Rough materials</th></tr> <tr> <td>• Mirror • Metal • Mirror. • Metal.</td><td>• piece of cloth. • wood. • paper.</td></tr> </table>	Smooth materials	Rough materials	• Mirror • Metal • Mirror. • Metal.	• piece of cloth. • wood. • paper.						
Smooth materials	Rough materials										
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6	<table> <tr> <th>Opaque objects</th><th>Transparent objects</th></tr> <tr> <td>• Wood. • Metal.</td><td>• Air. • Water. • lenses.</td></tr> </table>	Opaque objects	Transparent objects	• Wood. • Metal.	• Air. • Water. • lenses.						
Opaque objects	Transparent objects										
• Wood. • Metal.	• Air. • Water. • lenses.										
7	1. Chameleon 2. Fishing cat 3. Owl 4. Human										
8	<table> <tr> <th>Type of communication</th><th>The used senses</th></tr> <tr> <td>1. Watching TV.</td><td>- Sight and hearing</td></tr> <tr> <td>2. Flashing lights of fireflies.</td><td>- Sight</td></tr> <tr> <td>3. Echolocation in dolphins.</td><td>- Hearing</td></tr> <tr> <td>4. Using the cell phone.</td><td>- Sight and hearing</td></tr> </table>	Type of communication	The used senses	1. Watching TV.	- Sight and hearing	2. Flashing lights of fireflies.	- Sight	3. Echolocation in dolphins.	- Hearing	4. Using the cell phone.	- Sight and hearing
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3. Echolocation in dolphins.	- Hearing										
4. Using the cell phone.	- Sight and hearing										
9	1. (2)      2. (1)      3. (2) 4. (1)      5. (1)      6. (2)										

## الاختبارات Science - العلوم لفات

## Adaptation and Survival - lesson1

١

Adaptation helps the living organism in all the following characters, .....except

.death

.hiding

.surviving

.reproduction

٢

The starred agama keeps cool during a .....hot sunny day in desert by

.drinking more water

.finding a shade area

.eating green vegetables

.secreting more sweat

٣

If a desert lizard is transferred into a .....cool environment, it will stop

.breathing

.looking for water to drink

.looking for a shade area

.eating

٤

If you catch a piece of ice in your hand, you will begin to lose feeling in .....your fingers after a few

.hours

.minutes

.days

.weeks

٥

Penguins live in a polar climate

.....which

.looks like the forest climate

.is one of the hottest places on Earth

.is one of the coldest places on Earth

.looks like the desert climate

٦

The presence of an insulating layer of ....., keep the penguin's body .warm

protein and thin downy feathers

fat and thin downy feathers

protein and thick downy feathers

fat and thick downy feathers

٧

In penguin's feet, weave around each .other

cold blood vessels and thick downy feathers

warm blood vessels and its toes

cold blood vessels and its toes

warm blood vessels and cold blood vessels

٨

In penguin's body, the insulating layer of fat and thick downy feathers .trap..... against the skin

cold air

cold water

warm water

warm air

٩

Penguin's feet have blood vessels that bring.....up from its feet towards its .body

warm water

cold water

cold blood

warm blood

١٠

.....Ecosystem is

a habitat in which living organisms .live

.a type of adaptation

a characteristic that helps living .organisms survive

.one of human body systems

١١

Camouflage means that the .....animal

can be seen easily among its .surrounding

is hard to be seen among its .surrounding

.can be seen easily by its predators

.is easily to be seen by its preys

١٢

The presence of a thick white fur is an .....adaptation in

.polar bear

.fennec fox

.forest bear

.starred agama

١٣

Bears that live in forests have fur..... .that of polar bears

whiter than

darker than

brighter than

similar to

١٤

Fennec fox and caracal have..... that help them blend in with desert .landscape

sandy-colored fur

sandy-colored feathers

thick white fur

colorful scales

١٥

When we wear heavy clothes in winter, this is considered as a type .....of

- .camouflage
- .adaptation for hot weather
- .ecosystem
- .adaptation for cold weather

١٦

Which of the following birds is more difficult to be seen by its .....?predator

- .A red bird on a green tree
- .A yellow bird on a green tree
- .A green bird on a green tree
- .A blue bird on a green tree

## Adaptation and Survival - lesson2

١

All of the following sentences represent the meanings of adaptation .....except

- it is the changes that help the animal .to find a prey
- it is the characteristics that help .living things survive
- it is the changes that causes the .animal death
- it is the characteristics that help .living things reproduce

٢

The color of fur of fennec foxes .....protects them from

- .hot Sun
- .wind
- .rains
- .cold weather

٣

Fennec foxes have a tan-colored coat that provides.....in their environments

- communication
- respiration
- camouflage
- panting

٤

Panting in fennec foxes belongs .to..... adaptation

- both structural and behavioral
- only behavioral
- neither structural nor behavioral
- only structural

٥

Fennec foxes and arctic foxes live in burrows, this belongs to adaptation

- only structural
- only behavioral
- both structural and behavioral
- neither structural nor behavioral

٦

All the following properties help  
.....fennec foxes to stay cool except

- .make panting
- .tan-colored coat
- .extra-large ears
- .thick fur coat

٧

Changing the color of body coat of  
arctic foxes according to season, is  
.....considered as a type of

- .behavioral adaptation
- .change to the way of breathing
- .change to the way of drinking
- .physical adaptation

٨

All the following properties help arctic  
.....foxes to stay warm except

- .tan-colored
- .thick fur coat
- .short legs
- .short ears

٩

Both fennec foxes and arctic foxes are  
similar in all of the following  
.....except

- .they have excellent hearing ability
- .they can eat different things

.they have different sized ears

.they are live in the same habitat

١٠

.....Bull sharks can live in

- .seas, rivers and mud
- .salt water only

.rivers, seas and oceans

.fresh water only

١١

From physical adaptation of bull  
.....sharks is that they

- .hunt in the day as well as the night
- .are flexible about what they eat
- can live in both salt water and fresh
- .water

.can live in salt water only

١٢

When a panther chameleon stands  
within leaves of trees, the color of its  
.scales changes into..... color

blue

black

white

green

١٣

Special eyes of the panther  
chameleon are belong to.....  
.adaptation

neither structural nor behavioral  
only behavioral  
only structural  
both structural and behavioral

١٤

is considered as a behavioral .....  
.adaptation in the panther chameleon

Long sticky tongue

Puffing up its body during danger

Each eye can move independently

V-shaped feet

١٥

All the following properties are  
considered as structural adaptations  
in the panther chameleon except  
.....its

opening its mouth wide during  
.danger

.long sticky tongue

.each eye can move independently

.V-shaped feet

### Adaptation and Survival - lesson3

١

Plants have..... that help them  
survive and grow in different  
.environments

structural adaptation only

behavioral adaptation only

physical adaptation only

physical and behavioral adaptation

٢

It is difficult for rainforest plants to  
.....get

.wind

.water

.oxygen

.sunlight

٣

From the behavioral adaptation of  
.....acacia tree is that

it producing poison to make a bad  
.tasty leaves

.it has sharp spines among its leaves

.it has very tall trunk

.it has one very long root

٤

Acacia tree trunk and camel  
.....,hump

the first stores fat, and the second  
.stores water

the first stores water, and the second  
.stores fat

.both store fat

.both store water

٥

One of the animals that may eat  
.....acacia leaves, is

.penguin

.giraffe

.rat

.caracal

٦

All the following properties protect  
acacia leaves from being eaten by  
.....animals that

.they produce a poison

.they are high enough

.they are guarded by sharp spines

.they are brightly colored

٧

The acacia tree warning the other  
nearby acacia trees from animals by  
.....sending

.a watery message in the water

.a smelly message in the air

.a smelly message in the water

.a watery message in the air

٨

When the nearby acacia trees receive  
the smelly message from the acacia  
tree, which exposed to be eaten by  
.....animals, they

.start to lose water from their trunk

start to make a poisonous substance  
.in their leaves

.start to fall down their leaves

.start to invite bats to eat their leaves

٩

.....Umbrella-shaped tree are

.mangrove tree and acacia tree

.acacia tree and kapok tree

.barbary fig and water lilies

.mangrove tree and kapok tree

١٠

The roots of kapok tree are not  
planted deeply in the soil,  
.....because

.the soil contains less water

.the climate is very hot

.the soil contains more water

.the climate is very cold

١١

Kapok tree use the wind to carry its  
.....fluffy yellow seeds across its

.salt water habitat

.rainforest habitat

.snowy habitat

.desert habitat

١٢

If a plant grows in a dry desert, it needs..... to adapt for getting .water

long leaves

more sunlight

long roots

long branches

١٣

If a plant grows in a rainforest, where it is hard to reach sunlight. So, it needs ..... to adapt for getting .more sunlight

sharp spines

small roots

a very short trunk

a very tall trunk

١٤

If a plant grows in a snow habitat. So, it needs all the following characteristics except..... to adapt .this habitat

short branches

needle leaves

wide leaves

triangular shape

١٥

All the following are adaptation of different plants to keep animals away .....from them except that they

.have delicious-smelling flowers

.gather their branches high above

.have sharp spines

.produce poison

١٦

Desert plants are characterized by all .....the following except that they

.have long roots

.have sharp spines

.store water

.have wide leaves

١٧

.....Palm tree has a tiny leaves like

.kapok tree

.acacia tree

.water lily plant

.pine tree

١٨

From the structural adaptation of .....water lily plant is that

.it has tiny leaves

.it has long roots

.it has sharp spines

.it has wide leaves

١٩

Pine tree has a triangular shape to make snow slides over its branches

without breaking it. This structural adaptation makes this tree face the extreme cold climate like the feet .....of

- .penguin
- .fennec fox
- .brown bear
- .caracal

٢٠

Barbary fig keeps animals away like .....acacia trees by its

- .smell
- .poison
- .long leaves
- .sharp spines

#### Adaptation and Survival - lesson4

١

The needed energy to perform different functions of a living organism .....is obtained from

- .breathing and food processing
- .food processing only
- .breathing and running
- .breathing only

٢

All the following are organs in the .....digestive system except

- .nose

.stomach

.esophagus

.mouth

٣

The stomach lies between esophagus .....and

small intestine

mouth

anus

large intestine

٤

Which of the following organs is not included in breaking down of .....?food

.Mouth

.Stomach

.Small intestine

.Lungs

٥

The role of teeth in digestion process .....is

.crushing the food

.moistening the food

.swallowing the food

.mixing the food

٦

Crushing the food in your mouth is a ..... function of

.tongue

.saliva

.stomach

.teeth

٧

All the following are correct about the .....mouth except

.it has tongue

it is the first organ in the digestive  
.system

.it has teeth

.it moves food to the stomach directly

٨

In the..... saliva moistens food and  
.begins to break it down

mouth

stomach

small intestine

esophagus

٩

Saliva in the mouth makes the food  
becomes soft and mushy with the  
.....help of

.teeth only

.teeth and tongue

.tongue only

.teeth and esophagus

١٠

The throat is connected to the  
.....stomach through

.large intestine

.esophagus

.small intestine

.trachea

١١

The organ that moves the food into  
.....the stomach is

.tongue

.small intestine

.esophagus

.mouth

١٢

The food passes from the stomach  
to..... in order to complete the  
digestion process

large intestine

anus

esophagus

small intestine

١٣

The stomach mixes the food  
.....with

.stomach acid and digestive juices

.digestive juices only

.saliva and digestive juices

.stomach acid only

١٤

The acid present in the stomach helps  
.....in

.digestion of food

.crushing of food

absorption of water from undigested  
.food

.absorption of digested food quickly

١٥

The liver and..... pour their juices  
.into the small intestine

throat

esophagus

large intestine

pancreas

١٦

Juices from liver and pancreas flow  
.....into

.large intestine

.stomach

.small intestine

.mouth

١٧

The organ that is long winding tube its  
length is about more than six meters  
.....is called

.large intestine

.small intestine

.stomach

.esophagus

١٨

The undigested materials of the food  
pass from the small intestine  
.....into

.the brain

.the liver

.the pancreas

.the large intestine

١٩

In the large intestine..... is absorbed  
.from the undigested food

water

fats

starch

oil

٢٠

The solid wastes of undigested food  
become useless to the body, so the  
body must expel it outside the body  
.....through the

.small intestine

.mouth

.large intestine

.anus

٢١

The following pieces of advice keep the digestive system healthy  
.....except

- .chewing food well
- .drinking a little amount of water
- .avoid eating much fast meals
- .practicing sports regularly

٢٢

Meat is much easier to be processed,  
.....so dogs have

- only one stomach and a short .digestive system
- more than one stomach and a long .digestive system
- more than one stomach and a short .digestive system
- only one stomach and a long .digestive system

٢٣

The passage of air during inhalation  
.....is

- .throat - nose - lungs - trachea
- .trachea -throat-lungs - nose
- .nose - throat - trachea - lungs
- .lungs - nose - throat - trachea

٢٤

The throat is connected to the lungs  
.....through

- .ribs

.esophagus

small intestine

.trachea

٢٥

Inside the two lungs, at the end of the smaller air passages (bronchioles) there are tiny air sacs surrounded  
.....by

- .blood vessels
- .small intestine
- .water

.air

٢٦

The oxygen gas moves from air into  
..... blood at the

- .lungs
- .throat
- .nose
- .trachea

٢٧

All the following are methods to keep the respiratory system healthy  
.....except

- .breathing clean air
- .avoid the smoking and smoking areas
- .eating orange and guava
- .eating fruits rich in vitamin (A)

**Adaptation and Survival - lesson5**

١

- .....Both of human and fish
- .use oxygen gas to breathe in
- .use carbon dioxide gas to breathe in
- .can breathe in air
- .can breathe in water

٢

- .Fish use..... to breathe in water
- gills
- eyes
- lungs
- tail

٣

- Gills differ from lungs, in that
- .....gills
- .extract oxygen gas from water
- .take in oxygen gas
- .expel out carbon dioxide gas
- .extract oxygen gas from air

٤

- .....Gills in fish are considered as
- .behavioral adaptation
- .camouflage adaptation
- .behavioral and structural adaptation
- .structural adaptation

٥

- Changes that occur slowly to the
- .....,environment
- give a chance to the organisms for
- .adaptation
- .cause many organisms to respire
- .cause many organisms to disappear
- .cause many organisms to die

٦

- Rapid changes that occur to the
- .....ecosystem, done by
- .animal activities
- .starred agama
- .arctic foxes
- .human activities

٧

- Human can negatively affect the
- nature by all of the following
- .....activities, except
- .plowing grasslands
- .cutting down forests
- .throwing wastes in waterways
- .removing air pollutants

٨

- Human activities and bad habits, can
- .pollute..... of an ecosystem
- air and soil only
- air, soil and waterways

soil and waterways only

air and waterways only

٩

Pollution of an ecosystem, can  
.....affect

.plants and animals only

.humans and plants only

.plants, animals and humans

.animals and humans only

١٠

If an ecosystem is severely polluted,  
.....some animals can survive

by moving to another suitable  
.ecosystem

.by increasing the rate of heart beats

.by decreasing the rate of breathing

.by increasing the rate of breathing

١١

If the environment is slowly changed,  
.plants..... to survive and grow

must decrease their adaptation

must have a taproot

must have buttress roots

must land their seeds in another  
better place

١٢

Wildfires is most dangerous for plants  
.....rather than animals, because

.plants cannot move at all

.animals can adapt with fires

.plants can grow rapidly

.animals can grow easily

١٣

When the air pollution is high over a  
long period of time,..... may occur  
.to human

lung damages and asthma

heart problems and wounds

asthma and wounds

lung damages and wounds

١٤

Human can help restoring ecosystem  
by all of the following activities,  
.....except

preserving existed plants and  
.animals

.replanting the cleared forests

.removing air and water pollutants

.producing more factories exhaust

### Adaptation and Survival - lesson6

١

Amphibians live in..... that suits its  
.adaptation

arctic environment

sandy environment

dry environment

moist environment

٢

.....,Starred agama and salamanders

the first is amphibian, while the

.second is reptile

.both are amphibians

the first is reptile, while the second is

.amphibian

.both are reptiles

٣

If amphibians have gills not lungs and cannot respire through skin,

.....then

.they can live outside water

.they cannot live underwater

.they cannot live outside water

.they can live in desert landscape

٤

Amphibians can take in oxygen gas

.....from

.food and air

.air only

.water only

.water and air

٥

.....In rainforests, we can find

.arctic foxes and fennec foxes

.amphibians and fennec foxes

.panther chameleon and amphibians

.panther chameleon and arctic foxes

٦

..... ,Golden frog and polar bear

.both live in the same habitat

.both can breathe in water

.both are living organism

.both have the same body coat

٧

If the number of an animal species becomes zero due to severe changes in its natural habitat, this means that

.....this species

.will survive

.going to be extinct

.becomes extinct

.becomes endangered

٨

Both humans and amphibians breathe in oxygen. Which of the following .....?sentences is correct

Both can breathe oxygen gas from .water

Both can take in oxygen gas through .skin

Amphibians can breathe oxygen gas  
.in air and water

Humans can breathe oxygen gas  
.from water and air

٩

Blood vessels that carry oxygen gas .٩  
.....in amphibians, present in

.skin and lungs

.lungs and eyes

.digestive system and eyes

.skin and digestive system

١٠

Amphibians, lizards, trees, birds, fish  
.....and humans

some of them need carbon dioxide  
.gas to respire

all of them need oxygen gas to  
.respire

some of them need oxygen gas to  
.respire

all of them need carbon dioxide gas  
,to respire

١١

Amphibians extract..... directly  
.from water, to obtain energy

oxygen gas

green grass

fish wastes

carbon dioxide gas

١٢

To increase the number of an  
endangered species, you may have  
.....to

introduce a plant that causes harms  
.for this species

.introduce a new prey for this species

introduce a disease that causes  
.death for this species

introduce a new predator for this  
.species

١٣

If a pond where some frogs live, is  
highly polluted with wastes and  
viruses. What you have to do to  
.....?preserve these frogs

.Fill in pond with sand

.Dry this pond from water

Transfer these frogs to a clean water  
.habitat

Supply this pond with more oxygen  
.gas

١٤

To help some green frogs to increase  
their ability to hide from their  
predators. you can..... in their  
.environment

fill in the ponds with sand

transfer these frogs to a safe polar  
habitat

cultivate more green plants

transfer these frogs to a safe desert habitat

سلسلة ببساطة / بيومي سمير

Revision on concept 1,2,3 and 4

**Complete using the following words**

**(Starred agama- shaded- Palm- waxy- Adaptation - Penguin – thick - fat – up- down -weave around)**

1. .... lizard lives in the desert protects itself by keeping itself cool by finding ..... area during a hot sunny day.
2. .... leaves is covered with ..... layer to protect them from extreme hot climate.
3. .... is the change that happens to animals and help them to survive
4. .... lives in Antarctica that is one of the coldest places on the Earth.
5. Penguin has an insulating layer of ..... and ..... downy feathers that trap warm air against the skin to keep its body warm in the freezing cold.
6. Blood vessels bring cold blood .... from the feet in penguin feet
7. blood vessels bring warm blood ..... to the feet from the feather-coated body in penguin feet.
8. in penguin feet the warm blood vessels ..... the cold blood vessels.

**Complete using the following words**

**(Camouflage- Polar bear- white -thick - sneaks up- warm- Brown bear - dark- dark fur(brown fur)- Caracal and fennec fox- colorful scales- Structural adaptation- Behavioral adaptation)**

- 1- .....lives in the arctic region.
2. polar bear has .....and..... fur :
3. polar bear has white fur to help it blends in with the snow as it .....on its prey.
4. polar bear thick fur to help it stays .....in its cold arctic home.
- 5- .....bear lives in forests and has .....fur to help them stay hidden among the trees as they hunt.

6- .....lives in desert have sandy-colored or golden fur (tan-colored fur) to help them hide and blend in with desert landscapes.

7- Some types of lizards have .....that make them hard to see among the rocks.

8. ....adpatation like blood vessels in the penguin's feet and thick fur of the polar bear

9. ....adpatation like desert lizard looks for shade during hot sunny days and migration of some animals towards certain regions

10. ....is adaptation for hiding from predator or to capture preys.

**Fennec foxes and arctic foxes both live in dry desert climates. (extra-large ears -sandy-colored fur -hot deserts- excellent hearing- cool its body- burrows- food can be hard to find –)**

1- Fennec fox lives in .....

2- Fennec fox has .....

3- Fennec fox has..... that help the fennec fox to lose the heat to cool its body.

4- Fennec fox has a special shape of ears that allow .....to help fennec fox hunts.

5- Fennec fox pants like dogs, where it takes up to 700 breaths per minute to.....

6- Fennec fox lives in .....which are excellent places to stay cool during the sunny days.

7- Fennec fox eats different kinds of food, like insects, fruit, plant roots and even leftovers from another animal's prey because .....

## **2- Arctic fox**

**(thick fur- white –brown- stays warm- excellent hearing- different kinds of food- Arctic fox- night)**

1..... lives in tundra which is a different type of deserts with temperature as cold as (50°C) below zero in the winter months.



**3. Changing the pattern of lighting up in a firefly is an example of ..... adaptation(s).**

- a. structural and behavioral      b. physical and behavioral
- c. only structural      d. only behavioral

**4. All of the following ways can be used to communicate between people except .....**

- a. reading.      b. writing.      c. speaking.      d. flying.

**5. The ability to communicate through language and speech separates .....from animals.**

- a. humans   b. animals      c. plants      d. non living things

**6. Ancient ..... created hieroglyphs in central America that included 800 different signs.**

- a. Egyptians      b. Chinese      c. Mayans      d. Greeks

**7. Reading and writing are common types of communication in ..... world.**

- a. humans      b. animals      c. birds      d. plants

**8 . Displaying light is a type of communication that is found in both .....**

- a. plants and animals.      b. plants and humans.
- c. animals and humans.      d. animals.

**9. Which of the following organs are working together for seeing different objects?**

- a. Nose and brain.      b. Eyes and brain.
- c. Ears and brain.      d. Tongue and brain.

**10. All the following things are considered as a light source, except.....**

- a. the Sun.      b. fire
- c. eyes      b. the light lamp.

**11. .... energy affects the sensory receptors in eyes of living organisms vision.**

- a. Electric
- b. Sound
- c. Heat
- d. Light

**12. To know what you are seeing and recognize it, the ..... must receive impulses from eyes.**

- a. spinal cord
- b. brain
- c. sensory receptors in eyes
- d. sensory receptors in ears

**13. If you see someone walking around in a dark place without hitting anything around him, so this person may .....**

- a. have a lot of food energy.
- b. have a big ability to breathe.
- c. have the same hearing ability of bat.
- d. wear a night vision goggles.

**14. Animals that have a strong vision to hunt at night, include .....**

- a. owl and snake.
- b. owl and bat.
- c. owl and cat.
- d. cat and snake.

**15. The structural adaptation that helps the fishing cat to catch a prey at that its ability .....**

- a. to feel the heat of prey's body.
- b. to hide inside the forest.
- c. to digest its prey easily.
- d. of excellent night vision.

**16 . The thing that makes the eyes of fishing cats glow at night, is.....**

- a. the light that bounces off the surroundings.
- b. the light that bounces off the membrane on the back of their eyes.
- c. the main controlling centre of its body.
- b. the light that bounces on the membrane on the back of their eyes.



a surviving.      b. reproduction.      c hiding.      d death.

**25. The starred agama keeps cool during a hot sunny day in desert by .....**

- a. eating green vegetables.      b drinking more water.  
c secreting more sweat.      d. finding a shade area.

**26. If a desert lizard is transferred into a cool environment, it will stop .....**

- a looking for a shade area.      b. looking for water to drink.  
c breathing.      d. eating.

**27. If you catch a piece of ice in your hand, you will begin to lose feeling in your fingers after a few .....**

- a minutes.      b hours.  
c days.      d. weeks.

**28. Penguins live in a polar climate which .....**

- a. is one of the hottest places on Earth.  
b. is one of the coldest places on Earth.  
c. looks like the desert climate.  
d. looks like the forest climate.

**29. The presence of an insulating layer of ....., keep the penguin's body warm**

- a. protein and thick downy feathers  
b. fat and thin downy feathers  
c. fat and thick downy feathers  
d. protein and thin downy feathers

**30. In penguin's feet, .....weave around each other.**

- a. warm blood vessels and cold blood vessels  
b. warm blood vessels and its toes  
c. cold blood vessels and its toes  
d. cold blood vessels and thick downy feathers



**31 . In penguin's body, the insulating layer of fat and thick downy feathers trap ..... against the skin.**

a. cold air   b. cold water   c. warm water   d. warm air

**32. The needed energy to perform different functions of a living organism is obtained from .....**

- a. breathing only.
- b. food processing only.
- c. breathing and running.
- d. breathing and food processing.

**33. All the following are organs in the digestive system except.....**

a. mouth.   b. nose.   c. stomach   d. esophagus.

**34. The stomach lies between esophagus and .....**

a mouth.   b. large intestine.   c. small intestine.   d. anus.

**35. Which of the following organs is not included in breaking down of food? .....**

a. Mouth.   b. Stomach.   c. Lungs.   d. Small intestine.

**36. The role of teeth in digestion process is .....**

- a. mixing the food.   b. crushing the food.
- c. swallowing the food.   d. moistening the food.

**37. Crushing the food in your mouth is a function of .....**

a. stomach.   b. tongue.   c. saliva.   d. teeth.

**38. All the following are correct about the mouth except .....**

- a. it is the first organ in the digestive system.
- b. it has teeth.   c. it has tongue.
- d. it moves food to the stomach directly.

**39. In the ..... , saliva moistens food and begins to break it down.**



a. mouth   b. esophagus   c. small intestine   d. stomach

40. Saliva in the mouth makes the food becomes soft and mushy with the help of .....

- a. teeth only.                      b. tongue only  
c. teeth and esophagus.        d. teeth and tongue.

**41. The throat is connected to the stomach through**

- a esophagus.                      b. trachea.  
c. small intestine                d. large intestine

**42. The organ that moves the food into the stomach is intestine**

- a mouth.   b. tongue.        c. esophagus.   d. Small intestine.

**43. Humpback whales sing during ..... months, which is the mating season.**

- a. winter   b. summer c. spring d. autumn

**44. songs of humpback whales in winter are characterized by each of the following except .....**

- a. having high-pitched sounds.  
b. moving better through cold water.  
c. having soft sounds.        d. having low-pitched sounds.

**45. All of the following are forms of codes except .....**

- a. thump up and down hands.    b. expressions of faces.  
c. writing.                              d. swimming.

**46. When your eyes see a red traffic light, it sends a signal to you to .....**

- a. increase your speed.              b. decrease your speed.  
c. keep your speed as it is.        d. stop.

**47. People use a rescue flare to communicate with each other depending on the sense of .....**

- a. hearing.        b. sight.    c. smell.    d. touch.

**48. Sense organs collect information and send it to ..... for processing and understanding.**

- a. hands    b. legs    c. brain    stomach
- 49. Humans have ..... eyes than nocturnal animals.**
- a. bigger                      b. smaller  
c. stronger                  d. sharper
- 50. The pupils of human eyes open .....  
that of nocturnal animals.**
- a. typical to                 b. narrower than  
c. wider than                d. similar to
- 51. The wide pupils of human eyes, letting in ..... light than  
those of fishing cat**
- a. very large amount of                      b. large amount of  
c more    d. less-
- 52. Nocturnal animals depend on all the following senses to  
find out their preys at night, except .....**
- a. sight sense.                                  b. hearing sense.  
c. taste sense.                                  d. smelling sense.
- 53. All of the following are preys for tarsier, except .....**
- a insects.                                  b. penguins.  
c small lizards.                              d. small birds.
- 54. Both tarsier and owl, .....**
- a. can swim.                                  b. can fly.  
c. are nocturnal animals.    d. belong to the same species
- 55.. .... cannot move their eyes in their sockets.**
- a. fishing cats                                  b. arctic foxes  
c. humans                                      d. tarsiars
- 56. Each of human , fishing cat and tarsier .....**
- a. has an excellent night vision  
b. becomes more active at night.  
c. has a mirror-like membrane in its eyes.  
d. has two eyes adapted for vision.

**57. Which of the following do not need a big amount of light to see in the dark ? .....**

- a. Humans and cats.
- b. Humans and tarsiers.
- c. Cats and tarsiers.
- d. Bats and humans.

**58. To detect the place of a table in a completely dark room, you can depend on .....**

- a. sight sense.
- b. touch sense.
- c. taste sense
- d. hearing sense.

**59. In both human and owls, we find that the ability to see at night is.....**

- a. similar
- b. different.
- c. greater in human than in owls.
- d. better for human at night than during the day.

**60. The senses upon which you depend to hold a small radio playing at low volume, in a dark room are .....**

- a hearing and smell.
- b. touch and taste.
- c smell and taste.
- d. hearing and touch.

**61. The brain, as the control centre of the nervous system, can deal with ..... at the, same time.**

- a. two senses only
- b. three senses only
- c. four senses only
- d. all the five senses

**62. Some animals go out at night in their habitats to .....**

- a. search for air.
- b. search for a predator.
- c. search for a prey.
- d sleep in the open air.

**63. Animals that become active at night are called .....**

- a diurnal animals.
- b. nocturnal animals.
- c. extinct animals.
- d. endangered animals.

**64. Some animals become active during the night due to the following reasons except that .....**

- a. the night is characterized by the cool weather.

- b. the night is a good time for relaxation and rest.
- c. the night is quiet, so that they can hear preys.
- d. the night is a time when preys are available.

**65. A snake has the ability to catch preys at night because .....**

- a. it can smell them.
- b. it can hear their heartbeats
- c. it can see them clearly at night.
- d. it can sense the heat of their warm bodies.

**66 . Both bats and mosquitoes become active during night. which of the following statements is correct ? .....**

- a. Both can swim well.
- b. Both can run fast.
- c. Bats prey on mosquitoes.
- d. Mosquitoes prey on bats.

**67. All of the following sentences represent the meanings of adaptation except .....**

- a. it is the characteristics that help living things survive
- b. it is the characteristics that help living things reproduce.
- c. it is the changes that help the animal to find a prey
- d. it is the changes that causes the animal death.

**68. The color of fur of fennec foxes protects them from .....**

- a. wind.
- b. rains.
- c. hot Sun.
- d. cold weather.

**69. Fennec foxes have a tan-colored coat that provides ..... in their environment,**

- a. camouflage
- b. respiration
- c. panting
- d. communication

**70. Panting in fennec foxes belongs to ..... adaptation.**

- a. only structural
- b. only behavioral
- c. both structural and behavioral
- d. neither structural nor behavioral

**71. Fennec foxes and arctic foxes live in burrows, this belongs to ..... adaptation,**

- a. only structural
- b. only behavioral
- c. both structural and behavioral
- d. neither structural nor behavioral

**72. All the following properties help fennec foxes to stay cool except .....**

- a. thick fur coat.
- b. make panting.
- c. tan-colored coat.
- d. extra-large ears.

**73. Changing the color of body coat of arctic foxes according to season, is considered as a type of .....**

- a. behavioral adaptation.
- b. change to the way of breathing.
- c. physical adaptation.
- d. change to the way of drinking.

**74. All the following properties help arctic foxes to stay warm except .....**

- a. thick fur coat.
- b. short ears
- c. tan-colored.
- d. short legs.

**75. Both fennec foxes and arctic foxes are similar in all of the following except .....**

- a. they are live in the same habitat.
- b. they can eat different things.
- c. they have excellent hearing ability.
- d. they have different sized ears.

**76. Bull sharks can live in .....**

- a. fresh water only.
- b. salt water only.
- c. seas, rivers and mud.
- d. rivers, seas and oceans.

**77. Different .....represent different letters of alphabet in Morse Code.**

- a. symbols and figures
- b. symbols and dashes
- c. figures and dots
- d. dashes and dots

**78. Morse code consists of ..... beeps known as dots and..... beeps known as dashes.**

a. short, short    b. long, long    c. short, long    d. long, short

**79. In Morse code, long flashes can be used instead of .....**

- a. dots only.                      b. dashes only.  
c. both dots and dashes.    d. neither dots nor dashes.

**80. In Morse code, short flashes can be used instead of .....**

- a. dots only.                      b. dashes only.  
c. both dots and dashes.    d. neither dots nor dashes.

**81. If two persons communicate with each other by Morse code using light flashes this means that the sender and the receiver will depend on the sense of ..... in their communication.**

- a. hearing            b. sight    c. taste    d. smell

**82. The energy which must present to make our eyes able to see the objects around us, is ..... energy.**

- a. sound    b. electric    c. light    d. magnetic

**83. Fishing cat can see at night, as follows .....**

- a. light falls on the eyes, then reflected to the objects.  
b. light falls on the objects, then reflected into the eyes.  
c. sound falls on the eyes, then reflected to the objects.  
d. sound falls on the objects, then reflected into the eyes.

**84. Both light energy and sound energy, .....**

- a. can be seen.  
b. cannot be seen.  
c. the light energy can be seen, while sound energy cannot be seen.  
d. the sound energy can be seen, while light energy cannot be seen.

**85. Our eyes send ..... messages to the brain, where the information is processed,**

- a. written                      b. electrical impulses  
c. hearing                      d. light impulses

**86. All the following living organisms have tapetum lucidum, except .....**

- a. snakes.    fishing cats.       c dogs.       d. horses.

**87. The function of tapetum lucidum, looks like the function of.....**

- a. night vision goggles.       b. white paper.  
c black paper.                      d radio.

**88. In the nocturnal animals. the tapetum, lucidum is a life-saving adaptation because it helps them to ..... at night.**

- a. sleep                                      b. breathe  
c keep their body warm       d hunt a prey and avoid to be a prey

**89. When a jerboa hears the sound of a moving snake, it .....**

- a. remains standing in its place.  
b. jumps to hunt the snake.  
c. makes sounds to frighten the snake.  
d. jumps quickly to run away from the snake.

**90. The system responsible for moving your hand away from danger, such as touching a hot cup of tea, is the ..... system.**

- a. digestive       b. respiratory    c. nervous       d. urinary

**91. When snakes make a noise, the sensory receptors found in jerboa's ..... send a warning message to the brain.**

- a. ears       b. nose       c. feet       d. teeth

**92. When your hand touches the spines of a cactus plant, it is withdrawn in .....**

- a. less than one second.                      b. one minute.  
c two minutes.                                      d. one hour.

**93. During crossing a street. you had to stop for a moment to avoid the danger of being hit by a car. The system that alerted you was the ..... system.**

- a. respiratory    b. digestive    c. urinary    d. nervous

**94. Plants have ..... that help them survive and grow in different environments**

- a. structural adaptation only  
b. physical adaptation only  
c. behavioral adaptation only  
d. physical and behavioral adaptation

**95. It is difficult for rainforest plants to get .....**

- a. water.                      b. wind.  
c. sunlight.                  d. oxygen.

**96. From the behavioral adaptation of acacia tree is that .....**

- a. It has one very long root.  
b. it has sharp spines among its leaves.  
c. It has very tall trunk.  
d. it producing poison to make a bad tasty leaves.

**97. Acacia tree trunk and camel hump, .....**

- a. both store water only.  
b. both store fat.  
c. the first stores fat, and the second stores water.  
d. the first stores water, and the second stores fat.

**98. One of the animals that may eat acacia leaves, is .....**

- a. rat.                          b. caracal.  
c. penguin.                  d. giraffe.

**99. All the following properties protect acacia leaves from being eaten by animals except that .....**

- a. they are high enough.

- b. they are guarded by sharp spines.
- c. they are brightly colored.
- d. they produce a poison.

**100. The acacia tree warning the other nearby acacia trees from animals by sending .....**

- a. a watery message in the air.
- b. a watery message in the water.
- c. a smelly message in the air.
- d. a smelly message in the water.

**101 . When the nearby acacia trees receive the smelly message from the acacia tree, which exposed to be eaten by animals, they.....**

- a. start to lose water from their trunk.
- b. start to invite bats to eat their leaves.
- c. start to make a poisonous substance in their leaves.
- d. start to fall down their leaves.

**110. The way by which bees can communicate with, each other is .....**

- a. echolocation.
- b. flash lights.
- c. dancing
- d. Morse code

**111. The bee can rotate around itself in the form of number..... as an encoding message for other bees**

- a.2            b.4            c.6            d.8

**112. The scout honeybee makes ..... Round dance if the flower is very close**

- a 1            b.2            c.3            d.4

**113. The scout honeybee performs a waggle dance in the direction. .... if the flower is a little further away.**

- a. right-left    b. up-down    c. right-down    d. left-up

**114. All of the following are examples of communication electronic devices except .....**

- a. TV.                      b. a computer.                      c. a cell phone.      d. a knife

**115. Sending smelly messages when there is a shortage of food is the function of .....**

- a. queen ants.      b. nurse ants.      c. scout ants.      d. soldier ants

**116. Locating food is the function of .....**

- a. queen ants.      b. nurse ants.      c. scout ants.      d. soldier ants

**117. Protecting the colony from dangers is the function of .....**

- a. queen ants.      b. nurse ants.      c. scout ants      d. soldier ants

**118. The light waves travel in the air as .....**

- a. curved lines.                      b. zigzag lines.  
c. straight lines.                      d. circular lines.

**119. when light rays hit an object, all the following sentences are correct, except .....**

- a. some of this rays is absorbed by the object  
b. some of this rays is bounced off the object.  
c. some of this rays may go through the object.  
d. some of this rays reflects to our ears causing hearing.

**120. When light hits an object, a shadow of this object is formed because .....**

- a. light can pass through the object.  
b. light cannot pass through the object.  
c. this object reflects light.  
d. this object is a transparent object.

**121. Opaque material .....**

- a. allows light to pass through.  
b. absorbs some of light that fall on it only.  
c. bounces off some of light that fall on it only.

d. absorbs some of light that fall on it and bounces off the other.

**122. All of the following are transparent objects, except .....**

- a. glass.                      b. water.                      c. paper.                      d. air.

**123. You cannot see through all the following objects, except.....**

- a. human body.                      b. polished mirror.  
c. painted surface.                      d. a glass of window

**124. Opaque objects and transparent objects are characterized by.....**

- a. both of them reflect all falling light.  
b. both of them allow all falling light to pass through.  
c. both of them absorb all falling light.  
d. transparent objects allow most of light to pass through, while opaque objects does not

**123. Painted surface ..... the incoming light rays.**

- a. allows to pass                      b. absorbs only  
c. reflects only                      d. absorbs and reflects

**124. Polished mirror, causes falling light rays .....**

- a. to pass through it.  
b. to reflect at the same angle they strick the polished mirror.  
c. to reflect at different directions they strick the polished mirror.  
d. to diffuse like that of rough surfaces.

**125. Reaction time can be estimated from the time between .....**

- a suitable response, and sending message to the brain by the sensory receptors.  
b sending message to the brain by the sensory receptors, and suitable response.  
c suitable response, and suitable next response.  
d. sending two messages to the brain by the sensory receptors.

**126. The shorter the reaction time, the .....**

- a. faster the prey can run away from the predator.
- b. faster the predator can catch the prey.
- c. longer the time taken by the prey to detect the presence of a predator.
- d. less chance the prey survives.

**127. The reaction time is always .....**

- a. less than one second.
- b. about four minutes.
- c. about three minutes.
- d. about two minutes.

**128. Sensory receptors, brain and nerves, .....**

- a. they work separately from each other.
- b. they work together with each other.
- c. only the brain works individually.
- d. only sensory receptors work individually.

**129. Reaction time has an important effect in all of the following situations except .....**

- a. seeing red traffic light and applying the brakes to stop the car.
- b. hearing fire alarm, and people running away from this place.
- c. planting some types of plants in a garden.
- d. feeling the hotness of a solid object and moving hands away from it.

**131. When you see a car coming towards you, ..... to get away from it.**

- a. sensory receptors in the ears send a signal to the brain first
- b. sensory receptors in the eyes send a signal to the brain first
- c. sensory receptors in the eyes send a signal to sensory receptors in the ears
- d. sensory receptors in the ears send a signal to sensory receptors in the eyes

**132. The brain can explain what you see faster than what you hear, this is because .....**

- a. visual reaction time is less than auditory reaction time.
- b. visual reaction time is the same as auditory reaction time.
- c. visual response is faster than auditory response.
- d. auditory response is faster than visual response.

**133. Bats use their ..... to get information about their surroundings in the dark.**

- a. nose                      b. tongue                      c. eyes                      d. ears

**134. Echolocation is the use of ..... -pitched sounds for finding food.**

- a. medium                      b. low                      c. very low                      d. high

**135. .... use echolocation by bouncing high-pitched sounds in the air.**

- a. Bats                      b. Dolphins                      c. Whales                      d. Snakes

**136. The echo turns into ..... that a blind man can feel in his thumb while holding his special cane.**

- a. vibrations                      b. light                      c. heat                      d. electricity

**137. The blind person's cane and . emit a high-pitched sound that bounces off objects forming an echo.**

- a. lizards                      b. polar bears                      c. bull sharks                      d. bats

**138. The nervous system can do all the following functions except.....**

- a. gathering information.                      b. processing information.
- c. sending signals.                      d. falling of rains.

**139. If you smell smoke from something burning nearby, then you realized you had to move away fast. This means that there is an integration between the ..... In this situation.**

- a. digestive system and respiratory system

- b. digestive system and nervous system
- c. respiratory system and nervous system
- d. nervous system and urinary system

**140. Your sensation of thunder and lightning depends on your senses of .....**

- a. sight and hearing.
- b. sight and smell.
- c. hearing and touch.
- d. hearing and taste.

**141. You opened the door of your house when you heard the doorbell. Which of the following statements explains the sequence of messages inside your body in this situation?**

.....

- a. Ears → brain → feet → hand.
- b. Ears → brain → hand → feet.
- c. Ears → hand → brain → feet.
- d. Ears → feet → hand → brain.

**142. You pass the football to a player in your team. Which of the following statements explains the sequence of messages inside your body in this situation? .....**

- a. Feet    nerves    brain.
- b. Nerves    brain    feet.
- c. Nerves    feet    brain.
- d. Brain    nerves    feet.

**143. The ..... plays a great role in the functioning of the nervous system.**

- a. small intestine
- b. trachea
- c. brain
- d. oesophagus

**144. Your sensation of hot weather depends on sensory receptors in the .....**

- a. eyes.
- b. nose.
- c. ears.
- d. skin.

**145. Closing your eyes quickly when light rays fall on them represents a .....**

- a inhalation.
- b. reflex action.



c. countershading.      d. camouflage.

**146. Both of human and fish .....**

a. can breathe in air.

b. can breathe in water.

c. use oxygen gas to breathe in.

d. use carbon dioxide gas to breathe in

**147. Fish use ..... to breathe in water.**

a. tail

b. eyes

c. lungs

d. gills

**148. Gills differ from lungs, in that gills .....**

a. take in oxygen gas.

b. expel out carbon dioxide gas.

c. extract oxygen gas from water.

d. extract oxygen gas from air.

**149. Gills in fish are considered as .....**

a. behavioral adaptation.

b. structural adaptation.

c. camouflage adaptation.

d. behavioral and structural adaptation.

**150. Changes that occur slowly to the environment, .....**

a. cause many organisms to die.

b. cause many organisms to respire.

c. cause many organisms to disappear.

d. give a chance to the organisms for adaptation.

**151. Rapid changes that occur to the ecosystem, done by**

.....

a. arctic foxes.

b. starred agama.

c. human activities.

d. animal activities.

**152. Human can negatively affect the nature by all of the following activities, except .....**

a. cutting down forests.

- b. throwing wastes in waterways.
- c. plowing grasslands.
- d. removing air pollutants.

**153 . Human activities and bad habits, can pollute        of  
..... an ecosystem.**

- a. air and soil only
- b. soil and waterways only
- c air and waterways only
- d. air, soil and waterways

**154. Pollution of an ecosystem, can affect . ....**

- a plants and animals only.
- b. animals and humans only.
- c humans and plants only.
- d. plants, animals and humans.

**155. If an ecosystem is severely polluted, some animals can  
survive .....**

- a. by increasing the rate of breathing.
- b. by decreasing the rate of breathing.
- c. by increasing the rate of heart beats.
- d. by moving to another suitable ecosystem.

**Complete using the following words**

(Starred agama- shaded- Palm- waxy- Adaptation - Penguin – thick - fat – up- down -weave around)

1. **Starred agama** lizard lives in the desert protects itself by keeping itself cool by finding **shaded** area during a hot sunny day.
2. **Palm** leaves is covered with **waxy** layer to protect them from extreme hot climate.
3. **Adaptation** is the change that happens to animals and help them to survive
4. **Penguin** lives in Antarctica that is one of the coldest places on the Earth.
5. Penguin has an insulating layer of **fat** and **thick** downy feathers that trap warm air against the skin to keep its body warm in the freezing cold.
6. Blood vessels bring cold blood **up** from the feet in penguin feet
7. blood vessels bring warm blood **down** to the feet from the feather-coated body in penguin feet.
8. in penguin feet the warm blood vessels **weave around** the cold blood vessels.

**Complete using the following words**

(Camouflage- Polar bear- white -thick - sneaks up- warm- Brown - dark fur(brown fur)- Caracal and fennec fox- colorful scales- Structural adaptation- Behavioral adaptation)

- 1- **Polar bear** lives in the arctic region.
2. polar bear has **thick** and **white** fur
3. polar bear has white fur to help it blends in with the snow as it **sneaks up** on its prey.
4. polar bear thick fur to help it stays **warm** in its cold arctic home.
- 5- **Brown bear** lives in forests and has **dark fur(brown fur)** fur to help them stay hidden among the trees as they hunt.

6- **Caracal and fennec fox** lives in desert have sandy-colored or golden fur (tan-colored fur) to help them hide and blend in with desert landscapes.

7- Some types of lizards have **colorful scales** that make them hard to see among the rocks.

8. **Structural adaptation** like blood vessels in the penguin's feet and thick fur of the polar bear

9. **Behavioral adaptation** like desert lizard looks for shade during hot sunny days and migration of some animals towards certain regions

10. **Camouflage** is adaptation for hiding from predator or to capture preys.

**Fennec foxes and arctic foxes both live in dry desert climates.**  
**(extra-large ears -sandy-colored fur -hot deserts- excellent hearing- cool its body- burrows- food can be hard to find -)**

1- Fennec fox lives in .....

2- Fennec fox has .....

3- Fennec fox has..... that help the fennec fox to lose the heat to cool its body.

4- Fennec fox has a special shape of ears that allow .....to help fennec fox hunts.

5- Fennec fox pants like dogs, where it takes up to 700 breaths per minute to.....

6- Fennec fox lives in .....which are excellent places to stay cool during the sunny days.

7- Fennec fox eats different kinds of food, like insects, fruit, plant roots and even leftovers from another animal's prey because .....

## 2- Arctic fox

**(thick fur- white -brown- stays warm- excellent hearing- different kinds of food- Arctic fox- night)**

1 **Arctic fox** lives in tundra which is a different type of deserts with temperature as cold as (50°C) below zero in the winter months.

- 2- Arctic fox has a **thick fur** coat to keeps its body warm in extreme cold climate.
- 3- Arctic fox fur coat is **white** during winter, but turns in **brown** summer when the snow melts to help it sneaks up on prey in any season.
- 4- Arctic fox has short ears and legs to help it **stays warm**
- 5- Arctic fox has a special shape of ears that allow **excellent Hearing** to help arctic fox hunts.
- 6- Arctic fox lives in burrows which are excellent places for it to stay warm at **night**
- 7- Arctic fox eats **different kinds of food** like insects, fruit, plant roots and even leftovers from another animal's prey because food can be hard to find at the cold tundra.

**Put (t) or (F)**

1. palm leaves have fatty layer **F**
2. penguin lives in desert **F**
3. fennec fox has sandy colored fur **T**
4. bull shark do countershading phenomenon **T**
5. Acacia tree lives in savannah **T**
6. digestive canal ends with anus **T**
7. inhalation is a process in which oxygen enters two lungs and nitrogen leaves it in exhalation **F**
8. brain is the main control center of the body **T**
9. tarsier monkey has small eye **F**
10. blind persons use special cane **T**

**Choose the correct answer :**

1. A firefly is not a bird, but it is a type of .....  
a. amphibians.    b. lizards.    c. beetles.    d. reptiles
2. Which of the following is not a reason that fireflies produce a flash light ? .....  
a. To attract a mate.    b. For communication.  
c. To warn off predators.    d. To see in the dark.

**3. Changing the pattern of lighting up in a firefly is an example of ..... adaptation(s).**

- a. structural and behavioral      b. physical and behavioral  
c. only structural      d. only behavioral

**4. All of the following ways can be used to communicate between people except .....**

- a. reading.      b. writing.      c. speaking.      d. flying.

**5. The ability to communicate through language and speech separates .....from animals.**

- a. humans      b. animals      c. plants      d. non living things

**6. Ancient ..... created hieroglyphs in central America that included 800 different signs.**

- a. Egyptians      b. Chinese      c. Mayans      d. Greeks

**7. Reading and writing are common types of communication in ..... world.**

- a. humans      b. animals      c. birds      d. plants

**8 . Displaying light is a type of communication that is found in both .....**

- a. plants and animals.      b. plants and humans.  
c. animals and humans.      d. animals.

**9. Which of the following organs are working together for seeing different objects?**

- a. Nose and brain.      b. Eyes and brain.  
c. Ears and brain.      d. Tongue and brain.

**10. All the following things are considered as a light source, except.....**

- a. the Sun.      b. fire  
c. eyes      b. the light lamp.

**11. .... energy affects the sensory receptors in eyes of living organisms vision.**

- a. Electric
- b. Sound
- c. Heat
- d. Light

**12. To know what you are seeing and recognize it, the ..... must receive impulses from eyes.**

- a. spinal cord
- b. brain
- c. sensory receptors in eyes
- d. sensory receptors in ears

**13. If you see someone walking around in a dark place without hitting anything around him, so this person may .....**

- a. have a lot of food energy.
- b. have a big ability to breathe.
- c. have the same hearing ability of bat.
- d. wear a night vision goggles.

**14. Animals that have a strong vision to hunt at night, include .....**

- a. owl and snake.
- b. owl and bat.
- c. owl and cat.
- d. cat and snake.

**15. The structural adaptation that helps the fishing cat to catch a prey at night its ability .....**

- a. to feel the heat of prey's body.
- b. to hide inside the forest.
- c. to digest its prey easily.
- d. of excellent night vision.

**16 . The thing that makes the eyes of fishing cats glow at night, is.....**

- a. the light that bounces off the surroundings.
- b. the light that bounces off the membrane on the back of their eyes.
- c. the main controlling centre of its body.
- d. the light that comes from the body

**17. The sensory organs of a dolphin help it do all of the following, except .....**

- a surviving.
- b searching for food

c searching for water

d. protecting itself under water

**18. To describe the delicious taste of a piece of chocolate, we should use the sense of .....**

a. sight.

b. smell.

c. taste.

d. touch.

**19. To describe the color of your school bag to your friend, you should use the sense of .....**

a sight.

b. smell.

c. taste.

d. touch.

**20. Which of the following senses we use during watching a film on the T.V?**

a. Sight and taste.

b. Sight and smell.

c. Hearing and touch.

d. Sight and hearing.

**21. The five senses of humans include .....**

a. sight, hearing, touch. smell, and movement.

b. sight, movement, taste, touch, and smell.

c. taste, touch, movement, hearing, and smell.

d. sight. hearing, taste, smell, and touch.

**22. To know if a cup of water is hot or cold, we need to use the sense of .....**

a. sight.

b. hearing.

c. smell.

d. touch.

**23. We can distinguish between water and milk through .....**

a. taste and hearing

b. sight and hearing.

c. smell and hearing.

d. taste and sight.

**24. Adaptation helps the living organism in all the following characters, except .....**

a surviving.

b. reproduction.

c hiding.

D. death.

**25. The starred agama keeps cool during a hot sunny day in desert by .....**

- a. eating green vegetables.
- b drinking more water.
- c secreting more sweat.
- d. finding a shade area.

**26. If a desert lizard is transferred into a cool environment, it will stop .....**

- a looking for a shade area.
- b. looking for water to drink.
- c breathing.
- d. eating.

**27. If you catch a piece of ice in your hand, you will begin to lose feeling in your fingers after a few .....**

- a minutes.
- b hours.
- c days.
- d. weeks.

**28. Penguins live in a polar climate which .....**

- a. is one of the hottest places on Earth.
- b. is one of the coldest places on Earth.
- c. looks like the desert climate.
- d. looks like the forest climate.

**29. The presence of an insulating layer of ....., keep the penguin's body warm**

- a. protein and thick downy feathers
- b. fat and thin downy feathers
- c. fat and thick downy feathers
- d. protein and thin downy feathers

**30. In penguin's feet, .....weave around each other.**

- a. warm blood vessels and cold blood vessels
- b. warm blood vessels and its toes
- c. cold blood vessels and its toes
- d. cold blood vessels and thick downy feathers

**31 . In penguin's body, the insulating layer of fat and thick downy feathers trap ..... against the skin.**

- a. cold air
- b. cold water
- c. warm water
- d. warm air

**32. The needed energy to perform different functions of a living organism is obtained from .....**

- a. breathing only.
- b. food processing only.
- c. breathing and running.
- d. breathing and food processing.

**33. All the following are organs in the digestive system except.....**

- a. mouth. b. nose. c. stomach d. esophagus.

**34. The stomach lies between esophagus and .....**

- a mouth. b. large intestine. c. small intestine. d. anus.

**35. Which of the following organs is not included in breaking down of food? .....**

- a. Mouth. b. Stomach. c. Lungs. d. Small intestine.

**36. The role of teeth in digestion process is .....**

- a. mixing the food. b. crushing the food.
- c. swallowing the food. d. moistening the food.

**37. Crushing the food in your mouth is a function of .....**

- a. stomach. b. tongue. c. saliva. d. teeth.

**38. All the following are correct about the mouth except .....**

- a. it is the first organ in the digestive system.
- b. it has teeth. c. it has tongue.
- d. it moves food to the stomach directly.

**39. In the ....., saliva moistens food and begins to break it down.**

- a. mouth b. esophagus c. small intestine d. stomach

**40. Saliva in the mouth makes the food becomes soft and mushy with the help of .....**

- a. teeth only.                      b. tongue only  
c. teeth and esophagus.        d. teeth and tongue.
- 41. The throat is connected to the stomach through**  
a esophagus.                      b. trachea.  
c. small intestine                d. large intestine
- 42. The organ that moves the food into the stomach is .....**  
a mouth.   b. tongue.        c. esophagus.        d. Small intestine.
- 43. Humpback whales sing during ..... months, which is the mating season.**  
a. winter   b. summer c. spring d. autumn
- 44. songs of humpback whales in winter are characterized by each of the following except .....**  
a. having high-pitched sounds.  
b. moving better through cold water.  
c. having soft sounds.        d. having low-pitched sounds.
- 45. All of the following are forms of codes except .....**  
a. thump up and down hands.        b. expressions of faces.  
c. writing.                                d. swimming.
- 46. When your eyes see a red traffic light, it sends a signal to you to .....**  
a. increase your speed.                b. decrease your speed.  
c. keep your speed as it is.            d. stop.
- 47. People use a rescue flare to communicate with each other depending on the sense of .....**  
a. hearing.        b. sight.        c. smell.        d. touch.
- 48. Sense organs collect information and send it to ..... for processing and understanding.**  
a. hands   b. legs        c. brain        stomach
- 49. Humans have ..... eyes than nocturnal animals.**  
a. bigger                                b. smaller

c. stronger d. sharper

50. The pupils of human eyes open ..... that of nocturnal animals.

a. typical to b. narrower than  
c. wider than d. similar to

51. The wide pupils of human eyes, letting in ..... light than those of fishing cat

a. very large amount of b. large amount of  
c more d. less

52. Nocturnal animals depend on all the following senses to find out their preys at night, except .....

a. sight sense. b. hearing sense.  
c. taste sense. d. smelling sense.

53. All of the following are preys for tarsier, except .....

a insects. b. penguins.  
c small lizards. d. small birds.

54. Both tarsier and owl, .....

a. can swim. b. can fly.  
c. are nocturnal animals. d. belong to the same species

55.. ..... cannot move their eyes in their sockets.

a. fishing cats b. arctic foxes  
c. humans d. tarsiers

56. Each of human , fishing cat and tarsier .....

a. has an excellent night vision  
b. becomes more active at night.  
c. has a mirror-like membrane in its eyes.  
d. has two eyes adapted for vision.

57. Which of the following do not need a big amount of light to see in the dark ? .....

a. Humans and cats. b. Humans and tarsiers.

c. Cats and tarsiers. d. Bats and humans.

**58. To detect the place of a table in a completely dark room, you can depend on .....**

a. sight sense. b. touch sense.  
c. taste sense d. hearing sense.

**59. In both human and owls. we find that the ability to see at night is.....**

a. similar b. different.  
c. greater in human than in owls.  
d. better for human at night than during the day.

**60. The senses upon which you depend to hold a small radio playing at low volume, in a dark room are .....**

a hearing and smell. b. touch and taste.  
c smell and taste. d. hearing and touch.

**61. The brain, as the control centre of the nervous system, can deal with ..... at the, same time.**

a. two senses only b. three senses only  
c. four senses only d. all the five senses

**62. Some animals go out at night in their habitats to .....**

a. search for air. b. search for a predator.  
c. search for a prey. d sleep in the open air.

**63. Animals that become active at night are called .....**

a diurnal animals. b. nocturnal animals.  
c. extinct animals. d. endangered animals.

**64. Some animals become active during the night due to the following reasons except that .....**

a. the night is characterized by the cool weather.  
b. the night is a good time for relaxation and rest.  
c. the night is quiet, so that they can hear preys.  
d. the night is a time when preys are available.

**65. A snake has the ability to catch preys at night because .....**

- a. it can smell them.
- b. it can hear their heartbeats
- c. it can see them clearly at night.
- d. it can sense the heat of their warm bodies.

**66 . Both bats and mosquitoes become active during night. which of the following statements is correct ? .....**

- a. Both can swim well.
- b. Both can run fast.
- c. Bats prey on mosquitoes.
- d. Mosquitoes prey on bats.

**67. All of the following sentences represent the meanings of adaptation except .....**

- a. it is the characteristics that help living things survive
- b. it is the characteristics that help living things reproduce.
- c. it is the changes that help the animal to find a prey
- d. it is the changes that causes the animal death.

**68. The color of fur of fennec foxes protects them from .....**

- a. wind.
- b. rains.
- c. hot Sun.
- d. cold weather.

**69. Fennec foxes have a tan-colored coat that provides ..... in their environment,**

- a. camouflage
- b. respiration
- c. panting
- d. communication

**70. Panting in fennec foxes belongs to ..... adaptation.**

- a. only structural
- b. only behavioral
- c. both structural and behavioral
- d. neither structural nor behavioral

**71. Fennec foxes and arctic foxes live in burrows, this belongs to ..... adaptation,**

- a. only structural
- b. only behavioral
- c. both structural and behavioral
- d. neither structural nor behavioral

**72. All the following properties help fennec foxes to stay cool except .....**

- a. thick fur coat.
- b. make panting.
- c. tan-colored coat.
- d. extra-large ears.

**73. Changing the color of body coat of arctic foxes according to season, is considered as a type of .....**

- a. behavioral adaptation.
- b. change to the way of breathing.
- c. physical adaptation.
- d. change to the way of drinking.

**74. All the following properties help arctic foxes to stay warm except .....**

- a. thick for coat.
- b. short ears
- c. tan-colored.
- d. short legs.

**75. Both fennec foxes and arctic foxes are similar in all of the following except .....**

- a. they are live in the same habitat.
- b. they can eat different things.
- c. they have excellent hearing ability.
- d. they have different sized ears.

**76. Bull sharks can live in .....**

- a. fresh water only.
- b. salt water only.
- c. seas, rivers and mud.
- d. rivers, seas and oceans.

**77. Different .....represent different letters of alphabet in Morse Code.**

- a. symbols and figures
- b. symbols and dashes
- c. figures and dots
- d. dashes and dots

**78. Morse code consists of ..... beeps known as dots and..... beeps known as dashes.**

- a. short. short
- b. long. long
- c. short, long
- d. long, short

**79. In Morse code. long flashes can be used instead of .....**

- a. dots only.
- b. dashes only.

c. both dots and dashes.      d. neither dots nor dashes.

**80. In Morse code. short flashes can be used instead of .....**

a. dots only.                      b. dashes only.

c. both dots and dashes.      d. neither dots nor dashes.

**81. If two persons communicate with each other by Morse code using light flashes this means that the sender and the receiver will depend on the sense of ..... in their communication.**

a. hearing      b. sight      c. taste      d. smell

**82. The energy which must present to make our eyes able to see the objects around us, is ..... energy.**

a. sound      b. electric      c. light      d. magnetic

**83. Fishing cat can see at night, as follows .....**

a. light falls on the eyes, then reflected to the objects.

b. light falls on the objects, then reflected into the eyes.

c. sound falls on the eyes, then reflected to the objects.

d. sound falls on the objects, then reflected into the eyes.

**84. Both light energy and sound energy, .....**

a. can be seen.

b. cannot be seen.

c. the light energy can be seen, while sound energy cannot be seen.

d. the sound energy can be seen, while light energy cannot be seen.

**85. Our eyes send ..... messages to the brain, where the information is processed,**

a. written                      b. electrical impulses

c. hearing                      d. light impulses

**86. All the following living organisms have tapetum lucidum, except .....**

a. snakes.      fishing cats.      c. dogs.      d. horses.

**87. The function of tapetum lucidum, looks like the function of.....**

- a. night vision goggles.      b. white paper.  
c black paper.      d radio.

**88. In the nocturnal animals. the tapetum, lucidum is a life-saving adaptation because it helps them to ..... at night.**

- a. sleep      b. breathe  
c keep their body warm      d hunt a prey and avoid to be a prey

**89. When a jerboa hears the sound of a moving snake, it .....**

- a. remains standing in its place.  
b. jumps to hunt the snake.  
c. makes sounds to frighten the snake.  
d. jumps quickly to run away from the snake.

**90. The system responsible for moving your hand away from danger, such as touching a hot cup of tea, is the ..... system.**

- a. digestive      b. respiratory      c. nervous      d. urinary

**91. When snakes make a noise, the sensory receptors found in jerboa's ..... send a warning message to the brain.**

- a. ears      b. nose      c. feet      d. teeth

**92. When your hand touches the spines of a cactus plant, it is withdrawn in .....**

- a. less than one second.      b. one minute.  
c two minutes.      d. one hour.

**93. During crossing a street. you had to stop for a moment to avoid the danger of being hit by a car. The system that alerted you was the ..... system.**

- a. respiratory      b. digestive      c. urinary      d. nervous

**94. Plants have ..... that help them survive and grow in different environments**

- a. structural adaptation only
- b. physical adaptation only
- c. behavioral adaptation only
- d. physical and behavioral adaptation

**95. It is difficult for rainforest plants to get .....**

- a. water.
- b. wind.
- c. sunlight.
- d. oxygen.

**96. From the behavioral adaptation of acacia tree is that .....**

- a. it has one very long root.
- b. it has sharp spines among its leaves.
- c. it has very tall trunk.
- d. it producing poison to make a bad tasty leaves.

**97. Acacia tree trunk and camel hump, .....**

- a. both store water only.
- b. both store fat.
- c. the first stores fat, and the second stores water.
- d. the first stores water, and the second stores fat.

**98. One of the animals that may eat acacia leaves, is .....**

- a. rat.
- b. caracal.
- c. penguin.
- d. giraffe.

**99. All the following properties protect acacia leaves from being eaten by animals except that .....**

- a. they are high enough.
- b. they are guarded by sharp spines.
- c. they are brightly colored.
- d. they produce a poison.

**100. The acacia tree warning the other nearby acacia trees from animals by sending .....**

- a. a watery message in the air.
- b. a watery message in the water.
- c. a smelly message in the air.
- d. a smelly message in the water.

**101 . When the nearby acacia trees receive the smelly message from the acacia tree, which exposed to be eaten by animals, they.....**

- a. start to lose water from their trunk.
- b. start to invite bats to eat their leaves.
- c. start to make a poisonous substance in their leaves.
- d. start to fall down their leaves.

**110. The way by which bees can communicate with, each other is .....**

- a. echolocation.
- b. flash lights.
- c. dancing
- d. Morse code

**111. The bee can rotate around itself in the form of number..... as an encoding message for other bees**

- a.2
- b.4
- c.6
- d.8

**112. The scout honeybee makes ..... Round dance if the flower is very close**

- a.1
- b.2
- c.3
- d.4

**113. The scout honeybee performs a waggle dance in the direction. .... if the flower is a little further away.**

- a. right-left
- b. up-down
- c. right-down
- d. left-up

**114. All of the following are examples of communication electronic devices except .....**

- a. TV.
- b. a computer.
- c. a cell phone.
- d. a knife

**115. Sending smelly messages when there is a shortage of food is the function of .....**

- a. queen ants.   b. nurse ants.   c. scout ants.   d. soldier ants

**116. Locating food is the function of .....**

- a. queen ants.   b. nurse ants.   c. scout ants.   d. soldier ants

**117. Protecting the colony from dangers is the function of .....**

- a. queen ants.   b. nurse ants.   c. scout ants   d. soldier ants

**118. The light waves travel in the air as .....**

- a. curved lines.                      b. zigzag lines.  
c. straight lines.                      d. circular lines.

**119. when light rays hit an object, all the following sentences are correct, except .....**

- a. some of this rays is absorbed by the object  
b. some of this rays is bounced off the object.  
c. some of this rays may go through the object.  
d. some of this rays reflects to our ears causing hearing.

**120. When light hits an object, a shadow of this object is formed because .....**

- a. light can pass through the object.  
b. light cannot pass through the object.  
c. this object reflects light.  
d. this object is a transparent object.

**121. Opaque material .....**

- a. allows light to pass through.  
b. absorbs some of light that fall on it only.  
c. bounces off some of light that fall on it only.  
d. absorbs some of light that fall on it and bounces off the other.

**122. All of the following are transparent objects, except .....**

- a. glass.                      b. water.                      c. paper.                      d. air.

**123. You cannot see through all the following objects, except.....**

- a. human body.
- b. polished mirror.
- c. painted surface.
- d. a glass of window

**124. Opaque objects and transparent objects are characterized by.....**

- a. both of them reflect all falling light.
- b. both of them allow all falling light to pass through.
- c. both of them absorb all falling light.
- d. transparent objects allow most of light to pass through, while opaque objects does not

**123. Painted surface ..... the incoming light rays.**

- a. allows to pass
- b. absorbs only
- c. reflects only
- d. absorbs and reflects

**124. Polished mirror, causes falling light rays .....**

- a. to pass through it.
- b. to reflect at the same angle they strick the polished mirror.
- c. to reflect at different directions they strick the polished mirror.
- d. to diffuse like that of rough surfaces.

**125. Reaction time can be estimated from the time between .....**

- a suitable response, and sending message to the brain by the sensory receptors.
- b sending message to the brain by the sensory receptors, and suitable response.
- c suitable response, and suitable next response.
- d. sending two messages to the brain by the sensory receptors.

**126. The shorter the reaction time, the .....**

- a. faster the prey can run away from the predator.
- b. faster the predator can catch the prey.

c. longer the time taken by the prey to detect the presence of a predator.

d. less chance the prey survives.

**127. The reaction time is always .....**

a. less than one second.      b. about four minutes.

c. about three minutes.      d. about two minutes.

**128. Sensory receptors. brain and nerves, .....**

a. they work separately from each other.

b. they work together with each other.

c. only the brain works individually.

d. only sensory receptors work individually.

**129. Reaction time has an important effect in all of the following situations except .....**

a. seeing red traffic light and applying the brakes to stop the car.

b hearing fire alarm, and people running away from this place.

c planting some types of plants in a garden.

d feeling the hotness of a solid object and moving hands away from it.

**131. When you see a car coming towards you, ..... to get away from it.**

a. sensory receptors in the ears send a signal to the brain first

b. sensory receptors in the eyes send a signal to the brain first

c. sensory receptors in the eyes send a signal to sensory receptors in the ears

d. sensory receptors in the ears send a signal to sensory receptors in the eyes

**132. The brain can explain what you see faster than what you hear, this is because .....**

a. visual reaction time is less than auditory reaction time.

b visual reaction time is the same as auditory reaction time.

c. visual response is faster than auditory response.

d. auditory response is faster than visual response.

**133. Bats use their ..... to get information about their surroundings in the dark.**

a. nose                      b. tongue                      c. eyes                      d. ears

**134. Echolocation is the use of ..... -pitched sounds for finding food.**

a medium                      b. low                      c. very low                      d. high

**135. .... use echolocation by bouncing high-pitched sounds in the air.**

a. Bats                      b. Dolphins                      c. Whales                      d. Snakes

**136. The echo turns into ..... that a blind man can feel in his thumb while holding his special cane.**

a. vibrations                      b. light                      c. heat                      d. electricity

**137. The blind person's cane emit a high-pitched sound that bounces off objects forming an echo like.....**

a. lizards                      b. polar bears                      c. bull sharks                      d. bats

**138. The nervous system can do all the following functions except.....**

a. gathering information.                      b. processing information.  
c. sending signals.                      d. falling of rains.

**139. If you smell smoke from something burning nearby, then you realized you had to move away fast. This means that there is an integration between the ..... In this situation.**

a. digestive system and respiratory system  
b. digestive system and nervous system  
c. respiratory system and nervous system  
d. nervous system and urinary system

**140. Your sensation of thunder and lightning depends on your senses of .....**

- a. sight and hearing.                      b. sight and smell.  
c. hearing and touch.                      d. hearing and taste.

**141. You opened the door of your house when you heard the doorbell. Which of the following statements explains the sequence of messages inside your body in this situation?**

.....

- a. Ears → brain → feet → hand.  
b. Ears → brain → hand → feet.  
c. Ears → hand → brain → feet.  
d. Ears → feet → hand → brain.

**142. You pass the football to a player in your team. Which of the following statements explains the sequence of messages inside your body in this situation? .....**

- a. Feet    nerves    brain.              b. Nerves    brain    feet.  
c. Nerves    feet    brain.              d. Brain    nerves    feet.

**143. The ..... plays a great role in the functioning of the nervous system.**

- a. small intestine              b. trachea  
c. brain                          d. oesophagus

**144. Your sensation of hot weather depends on sensory receptors in the .....**

- a. eyes.    b. nose.    c. ears.    d. skin.

**145. Closing your eyes quickly when light rays fall on them represents a .....**

- a inhalation.                      b. reflex action.  
c. countershading.              d camouflange.

**146. Both of human and fish .....**

- a can breathe in air.

b can breathe in water.

c. use oxygen gas to breathe in.

d. use carbon dioxide gas to breathe in

**147. Fish use ..... to breathe in water.**

a. tail

b. eyes

c. lungs

d. gills

**148. Gills differ from lungs, in that gills .....**

a. take in oxygen gas.

b. expel out carbon dioxide gas.

c. extract oxygen gas from water.

d. extract oxygen gas from air.

**149. Gills in fish are considered as .....**

a. behavioral adaptation.

b. structural adaptation.

c. camouflage adaptation.

d. behavioral and structural adaptation.

**150. Changes that occur slowly to the environment, .....**

a. cause many organisms to die.

b. cause many organisms to respire.

c. cause many organisms to disappear.

d. give a chance to the organisms for adaptation.

**151. Rapid changes that occur to the ecosystem, done by**

**.....**

a. arctic foxes.

b. starred agama.

c. human activities.

d. animal activities.

**152. Human can negatively affect the nature by all of the following activities, except .....**

a. cutting down forests.

b. throwing wastes in waterways.

c. plowing grasslands.

d. removing air pollutants.

*Mr / AbdElRhman Talaat*

**153 . Human activities and bad habits, can pollute      of  
..... an ecosystem.**

a. air and soil only

b. soil and waterways only

c air and waterways only

d. air, soil and waterways

**154. Pollution of an ecosystem, can affect . ....**

a plants and animals only.

b. animals and humans only.

c humans and plants only.

d. plants, animals and humans.

**155. If an ecosystem is severely polluted, some animals can  
survive .....**

a. by increasing the rate of breathing.

b. by decreasing the rate of breathing.

c. by increasing the rate of heart beats.

d. by moving to another suitable ecosystem.

**GRADE 4 HELP**

<https://t.me/Grade4Helpchannel>

### **Q1 Put true or false**

- 1. bat sleep with head up ( )**
- 2. fennec fox lives in polar regions ( )**
- 3. fish have gills to inhale oxygen from air ( )**
- 4. bat is active at day so it's considered nocturnal animals ( )**
- 5. human use lung to breathe from air ( )**
- 6. bat belongs to bird ( )**
- 7. bat & whale use property echolocation ( )**
- 8. respiratory system is responsible for move fresh air into your body while removing waste gases ( )**
- 9. amphibians use lung to breathe like as fish ( )**
- 10. salamander lives in dry environment ( )**
- 11. amphibians covered with skin is considered structural adaptation ( )**
- 12. frog take carbon dioxide from air ( )**
- 13. in water amphibians breathe through skin is considered structural adaptation ( )**

14. Amphibians body is covered with dry skin ( )
15. Amphibians can live on land only ( )
16. Gill of fish is behavioral adaptation ( )
17. cutting of tree is natural changes ( )
18. Floods is natural changes ( )
19. plowing grassland is human change ( )
20. if human activity slowly change ( )
21. the gas that enter two lungs during inhalation process is carbon dioxide ( )
22. during inhalation process diaphragm move up ward ( )
23. during exhalation process diaphragm move downward ( )
22. during inhalation process Size of chest enlarge ( )
23. during exhalation process is mean we breath out the lungs and diaphragm relax and move upward ( )
24. respiratory system is responsible for digest food ( )
25. fishing cat & bat are animals that active at night ( )
26. dolphin use echo to find food ( )

27. Savannah forest is easy to find water ( )
28. savannah forest exist to place mild temperatures ( )
29. polar fox live in extreme hot regions ( )
30. long root of acacia tree is behavioral adaptation ( )
31. Acacia has leaves to prevent animals to eat is structure adaptation ( )
32. feet of chromosome is (s) shaped ( )
33. type of adaptation change some part of animal 'body is structure adaptation ( )
34. penguin has layer of protein & feathers ( )
35. forest bear has white fur is considered structural adaptation ( )
36. blood vessel in feet of penguin is structure adaptation ( )
37. change color of scales in chameleon is behavioral adaptation ( )
38. change colors of fur in arctic fox is behavioral adaptation ( )

39. penguin lives in tropical regions ( )
40. migration of birds is behavioral adaptation ( )
41. countershading is found some animals like bull shark is structure adaptation ( )
42. jerboa is one of types reptiles ( )
43. jerboa can hops in zigzag paths ( )
45. Jerboa has long front legs to help jump long distance ( )
46. Jerboa has a weakness hearing ( )
47. Jerboa has extras large ears is considered structural adaptation (.....)
48. jerboa has feet and toes covered with feathers ( )
49. lizard covered with hair ( )
50. nose is main control center of body ( )
51. sensory receptors is kind of nerves that responsible for receive information from environmental ( )
52. chameleon covered with fur ( )
53. the sensory organs in the skin is responsible about touching ( )

54. it is from nocturnal reptiles has the ability to sense heat is lizard ( )
55. dog use sense of sight and smell to recognize friends ( )
56. tarsier monkey is about 10 cm include tail (...)
57. human have bigger eyes than nocturnal animals (...)
58. moon is main source of light (...)
59. night vision goggles device that human use to see in the dark (...)
60. cat & bat animals have strong sight (...)
61. all cat have member like mirror on front eye (...)
62. "tapetum lucidum". is feature that relates to the sense of hearing (...)
63. it so easier see objects in dim light than bright light (...)
64. scout honeybee is responsible for location of food ( )
65. nurse ant is responsible for protect them from danger ( )
66. waggle dance is mean it is direction up to left ( )

67.The bee does two round dance if the flower is very close. ( )

68.humans use movements to communicate like as bee( )

69.mores code is consist of short beeps as dash and long beeps as dots( )

70.soft voice of women is high pitch sounds ( )

71.expression on faces are codes to help people understand feeling ( )

72. rough voice of birds is high pitch sounds( )

73. low pitch sounds travel better in cold water in winter( )

Q2) cross out the odd word

1. wood mirror plastic clothes
2. cow dog flat teeth 4 stomach
3. stomach brain mouth anus
4. pharynx \_ nose mouth \_ diaphragm
5. fishing cat \_ owl \_ dolphin \_ snake

Q3) look at the picture and chose correct answers



A)

1. tarsier monkey is one of Species mammal
2. tarsier monkey is active at night
3. tarsier monkey can move eye
4. tarsier monkey like as owl in some structural adaptation

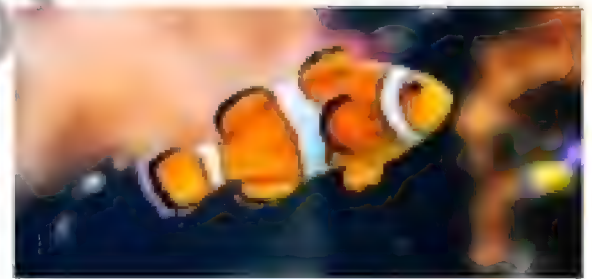
**B)**

1. rays will reflect at the same angle
2. rays will reflect at the one direction
3. this is smooth surface
4. rays will reflect in different direction



**C)**

- a. this is organism can live in water
- b. this organism use lung to breath from air like as frog
- c. this is organism use gills to breath
- d. ( a, c)



**D)**

- a. diffuse reflection
- b. The rays will reflect at the same angle
- c. rays will reflect in different directions
- d. may be this is wood



**E)**

- a. communicate with each other by using the songs**
- b. communicate with each other by produce flash light**
- c. use movement to communicate with each other**
- d. communicate with each other by send strong smell message**



**F)**

- a. this is make a high-pitched sound and then listen for an echo**
- b. make a low-pitched sound and then listen for an echo**
- c. high pitch sounds change into vibration**
- d. belongs to bird**



G)

a.blind person is similar with bat emit a high-pitched sound

b.blind person is similar with bat emit a low-pitched sound

c.high-pitched sound change into vibration

d.(a, c)



Q4 choose from column a what it suits in column b

<u>a</u>	<u>b</u>
1. fennec fox 2. snake 3. owl 4. amphibians 5. bull shark 6. fish 7. human	a. use lung to breathe b. live in salt water & fresh water c. use Gill to breathe d. live on land & fresh water e. belong to reptiles like as chameleon f. has huge eye is structure adaptation h. live in desert

**Q4 choose from column a what it suits in column b**

<b><u>a</u></b>	<b><u>b</u></b>
1.lens 2."tapetum lucidum 3.Transparent object 4.Rough surface 5.optometrist 6.night vision goggle 7.electric lamp	a. in the absence of light you can use to see in dark b.focuses light, it collects the light in a point, c.t can determine how to correct the vision d.means "tapestry of light". f. example about source of light g.rays will reflect in different directions h.doesn't form shadow

<b><u>a</u></b>	<b><u>b</u></b>
1.tarsier monkey 2. dolphin 3. fishing cat	a.eye has huge eye like owl b.membrane like mirror on back eye d. produce sound waves to find food

**Q5. chose correct answers**

**1. gas that released from lung**

**(oxygen , carbon dioxide ,nitrogen)**

**2.. muscle help in the mechanism respiration process in human**

**( diaphragm ,gills ,small intestine ,none of them)**

**3. mouth , stomach, large intestine is belong to ..... system**

**(respiratory system ,digestive system ,nervous system ,none of them)**

**4.lungs, bronchi, nose is belong to ..... system**

**(respiratory system ,digestive system ,nervous system ,none of them)**

**5.the first organ in the digestive system**

**(mouth , stomach ,nose ,bronchi)**

**6.the first organ in the respiratory system**

**(mouth, stomach, nose, bronchi)**

**7. common organ found in respiratory system, digestive system**

**(nose , diaphragm , pharynx ,mouth)**

**8. .... absorb water from undigested food**

**(large intestine , stomach ,small intestine)...**

**9.. ...and ..... secret into small intestine**

➤ **liver and pancreas**

➤ **saliva and liver**

➤ **pancreas and saliva**

➤ **mouth and pharynx**

**10.nocturnal animals live in extreme ... regions**

**(cold ,hot ,all of them ,none of them )**

**11. spinal cord belong to .... system**

**(respiratory , digestive nerves system , urinary system )**

**12..... can rotate head in all directions**

**(owl , bat , snake fennec fox)**

**13.leaves of kapok tree is ..... shaped**

**(liner , hand , circle , none of them)**

**14. Part of Acacia tree is responsible for storage water**

**(trunk ,leave , flowers , none of them )**

Science SK

**1. What is adaptation?**

- a) A process by which organisms create offspring (children).
- b) A characteristic changed over time to help living things survive and reproduce.
- c) An excretion made by organisms to get rid of wastes.
- d) A form of pollination used by trees.

**2. What are the characteristics of the fish that adapt to live in dark deep sea environment?**

**Circle all the characteristics that apply:**

Brilliant colors      -      big fins      -      colorless skin      -      more efficient gills

Good eye sight      -      great hunting abilities      -      poor eye sight      -      thick scales

**3. Which would die if it didn't have the right adaptation to survive in its environment?**

- a) Rock                      c) apple tree
- b) car                      d) glass

**4. Read the following scenario. In which part of the event is your nervous system receiving a message?**

- a) Your finger touch a thorn of plant
- b) You yell "ouch!"
- c) You pull your hand away
- d) Your finger begins to bleed

**5. What are the two organs that make the central nervous system?**

- a) Brain and neck                      c) Brain and spinal cord
- b) Sensory and motor system      d) Spinal cord and backbone

6. Amira suddenly woke up and smelled something burning. She went down the stairs to see what was happening. She found the woods were burning in the fire place (chimney). Why did Amira wake up?
- The smell of the fire sent a signal through her blood to her brain and she woke up.
  - The smell of the fire sent a signal through her nerves to her brain and she woke up.
  - Amira was sick and her nose was stuffy so she could not sleep.
  - Amira was feeling cold so she couldn't sleep.
7. How is your nervous system like a delivery pizza restaurant?
- It needs fuel to run efficiently.
  - Orders are sent according to the type of messages received.
  - Receiving and sending messages takes a long time.
  - Not everyone sends his order to the same location.
8. Match each sensory organ to the type of information that the organ's receptors collect.

Sensory organ	Sensory informant
1) Nose	A. Light coming from a window
2) Tongue	B. Bitter taste of lemon
3) Eyes	C. Heat from hot stove
4) Hand	D. Noise coming from car speakers
5) ears	E. Nice perfume scent

9. Place the sentences in order of how the information is processed by the brain. Use 1 for statement that happens first and 4 for statement which happens last.
- \_\_\_\_\_ Nerves in the body connect the sense organs to the brain.
- \_\_\_\_\_ Information from the environment is received by a sensory organ
- \_\_\_\_\_ The brain determines what to do with the information
- \_\_\_\_\_ The signal travels as electrical pulses from the organ to the nerves in the brain.

10. Which of the following is a source of light?

- a) Eyes
- b) Fire
- c) the moon
- d) Mirror

11. What property of light helps you to see yourself in a mirror?

- a) Refraction
- b) Absorption
- c) Reflection
- d) Multiplication

12. Which sentence best explains why you see yourself at a mirror?

- a) Light refracted as it moves through the mirror
- b) Light is reflected bouncing off the mirror
- c) Light is absorbed by the mirror
- d) Light passes through the mirror

13. Salma visited a lake surrounded by mountains. She observed this image of the mountains on the surface of the lake's water.



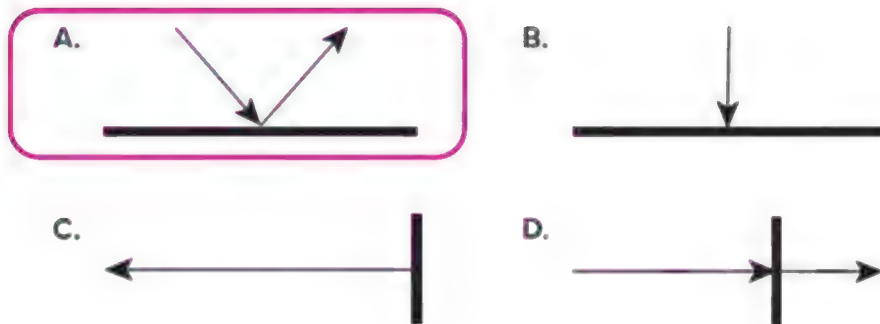
Salma built a diorama to model what she saw. She used an image of a mountain and a mirror to represent the lake. **Which is the best explanation of why her model represents what she saw?**

- a) The mirror reflects the light on the image of the mountain
- b) The image of the mountain is refracted on the mirror.
- c) The mirror refracts the light on the image of the mountain
- d) The image of the mountain is reflected on the mirror.

**14.** Which set of objects below would all reflect light regularly?

- a) Mirror, metal spoon, brick wall
- b) Metal spoon, tree trunk, aluminum foil
- c) Metal spoon, aluminum, mirror.
- d) Aluminum foil, brick wall, metal spoon.

**15.** The arrows in each answer choice represent light rays. Which drawing shows how light is reflected by a mirror?



**16.** What type of surface scatters light unevenly (irregularly)

- a) Shiny
- b) Smooth
- c) Rough
- d) Transparent

**17.** What word is used to describe light strikes a smooth and shiny surface and bounces off?

- a) Shadow
- b) Energy
- c) Reflection
- d) Wave length

**18.** What happens to the light when it hits a rough surface?

- a) Reflection
- b) Absorption
- c) Scattering
- d) Refraction

## **G (4) Science**

### **Assessment Sheet (2)**

Name: .....

Class: .....

Date: .....

#### **Q1: Choose:**

- 1- Why the fox have white fur in winter and brown fur in summer?
  - a) They like to change fur color
  - b) They learned it from their parents
  - c) The changing of fur color helps them to hide
  - d) They will run faster
- 2- Chameleon next to a large blue flower so predators cannot find it. This will help it in....
  - a) Migration
  - b) Camouflage
  - c) Sleeping well
  - d) Eating well
- 3- Penguin feet are adapted by .....
  - a) Feet blood vessels rotate around each other
  - b) Fur covering the feet
  - c) Having long feet
  - d) Running faster
- 4- A giraffe's long neck is an adaptation that helps it to .....
  - a) reach leaves high in trees
  - b) drink more water from the trees
  - c) hide from other animals
  - d) catch the birds
- 5- Some plants survive in desert because they have.....
  - a) Long roots
  - b) Large leaves
  - c) Large seeds
  - d) Smelly flowers
- 6- Some animals have a fat layer under their skin in order to .....
  - a) Make camouflage
  - b) Feel warm
  - c) hunt more fish
  - d) climb the tree
- 7- Which of the following is NOT an example of a structural adaptation?
  - a) fur color
  - b) sleeping upside down
  - c) long beak
  - d) sharp teeth
- 8- Short ears of polar fox help it to ....
  - a) Run faster
  - b) Hide from predators
  - c) stay warm
  - d) stay cool
- 9- A porcupine has spines that represent .....
  - a) Structural adaptation
  - b) Camouflage
  - c) Behavioral adaptation
  - d) Staying warm
- 10- Bats depend on .....to catch its preys.
  - a) Sight
  - b) Touch
  - c) Echolocation
  - d) Smelling

- 11-When you smell a nice perfume. What is the first step that happens to process the information by the nervous system?
- Nerves send information from the nose to the brain.
  - The nerve receptors in the nose receive information from the environment
  - The brain determines what to do with the information
  - The signal travels as electrical pulses from the organ to the nerves in the brain.
- 12-What feature of acacia tree helps it grow without being eaten by other animals?
- Flowers with bright colors
  - Deep roots
  - Sharp thorns
  - Small leaves
- 13-Some plants have small leaves to .....
- Save water
  - Make seeds
  - Grow tall
  - Fall off in winter
- 14-The object that makes a regular reflection is...
- wall
  - mirror
  - paper
  - stone
- 15-Which property of light helps us to see?
- refraction
  - reflection
  - opaque objects
  - adaptation
- 16-The object behind .....can be seen clearly.
- Carton
  - door
  - wall
  - widow
- 17-A living organism makes a special dance of number 8 pattern as a type of communication.
- Bats
  - bees
  - fireflies
  - monkey
- 18-Which of the following living organisms don't depend on hearing to communicate with each other?
- Dolphin
  - whales
  - owls
  - fireflies
- 19-Which of the following living organisms use language and speech to communicate with each other?
- Whales
  - fireflies
  - snake
  - humans
- 20-The cane used by blind people is inspired from.....
- Owl
  - eagle
  - bats
  - horse
- 21-Huddling of penguins together to keep their bodies warm is a type of .....
- Structural adaptation
  - Camouflage
  - behavioral adaptation
  - sleeping
- 22-Snake depend on the sense of ..... to find other animals.
- Sight
  - hearing
  - heat
  - smelling
- 23-Ancient Egyptians used the..... to make the papers.
- Papyrus reed
  - Acacia leaves
  - bamboo reed
  - grass

## **Q2: Write your opinion:**

- 1) Imagine we if we take some animals that live in the desert to the polar region. Are they going to survive? What are the features that they don't have to survive?

-----  
-----  
-----

- 2) Some animals live in very cold habitats. What do you think they have to adapt and survive in these habitats?

-----  
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-----

## **Q3: Write the type of adaptation:**

- |  |       |
|--|-------|
| 1- Bull shark has dark back and white belly.                     | ----- |
| 2- Chameleon puffing up its body during danger.                  | ----- |
| 3- Panting of fennec fox to cool its body.                       | ----- |
| 4- Short ears of arctic fox help it to stay warm.                | ----- |
| 5- A porcupine has spines to protect itself from enemies.        | ----- |
| 6- Migration of birds to warmer places.                          | ----- |
| 7- Camels store food in their hump.                              | ----- |
| 8- Animals sleep most of winter time to avoid very cold weather. | ----- |

## **Q4: Write True or False:**

1. Migration of bird to find food and warmer temperature is considered a structural adaptation.
2. Lions often hide in the tall grass while tracking their preys. This is an example of structural adaptation.
3. Palm trees have short roots to reach deep underground water
4. Bull shark has dark back and white belly. This represent behavioral adaptation
5. Panting of fennec fox represents a behavioral adaptation.
6. Lizard colored scales helps it to make migration.
7. Short ears of arctic fox help it to cool its body.
8. Owls have large eyes to help them hunt in the day.
9. Tortoise shell protects it from other animals.
10. Light can easily pass through opaque materials.
11. Whales make high pitch sounds during winter and low pitch in summer.

**Q5: Write the scientific term:**

No	Definition	Scientific term
1-	Features (characteristics) that help living organisms survive and reproduce in its ecosystem.	
2-	A feature involves some parts of the animal's body (shape, body covering	
3-	The type of animals that make activities during the night only.	
4-	The ability of the animal to change its color to survive by hiding from other animals.	
5-	System responsible for breaking down the food and changing it from complex form into a simple one.	
6-	System responsible for breathing (respiration).It supplies body with oxygen gas & gets rid of carbon dioxide gas.	
7-	Small animals include (Frogs – Toads – Salamanders) breathe oxygen from air (by lungs ) and from water (by skin).	
8-	The main control center of human body	
9-	Nerves in backbone Carry messages from brain to body and vice versa	
10-	it is time taken by organism's body to react to different stimuli around it	
11-	It is bouncing (returning back) of light when it falls on a reflecting surface (opaque object).	
12-	It is a pattern (shape) that has a specific meaning agreed upon by the sender and receiver.	
13-	Actions happen when the body is exposed to external stimuli such as removing your hand quickly when you suddenly touch a thorn of plant.	
14-	Travelling of some animals from one place to another as seasons change.	
15-	Materials that don't allow light to pass through.	
16-	Dark area behind objects when light falls on it	
17-	To determine the place of animals by returning back of echo.	
18-	Materials that allow most of light to pass through and pictures can be seen clearly behind them.	

## Prim 4

### final revision on concept 1:-

#### **Be careful and choose the correct answer:-**

1- ..... is a type of fox has sandy -colored fur to adapt its desert environment

- a) polar
- b) fennec
- c) both of them

2- ..... is a property that helps animals to blend in with their surrounding environment

- a) mimicry
- b) camouflage
- c) adaptation

3-..... an animal that has a layer of fat and thick downy feather to adapt extreme cold weather

- a) polar bear
- b) fennec fox
- c) penguin

4- forested bears have ..... color fur

- a) black
- b) white
- c) black & white

5- ..... is from the lizard animals that can live in desert ecosystem

- a) white lizard
- b) starred agama lizard
- c) both of them

6- the body of some types of lizard are covered with ..... to blind in the environment

- a) colorful fur
- b) colorful feather
- c) colorful scales

- 7- the white fur is a ..... adaptation in bear that live in polar regions
- a) behavior
  - b) structure
  - c) mutation
- 8- penguins feet are covered with ..... To keep them warm
- a) fur
  - b) feather
  - c) scales
- 9- the sandy-colored fur of caracal helps it blend in with ..... environment
- a) desert
  - b) polar regions
  - c) tropical
- 10- camouflage means that the animal .....
- a) can be seen easily among its surrounding
  - b) is hard to be seen among its surrounding
  - c) is easily to be seen by
- 11- adaptation helps the living organisms in all the following characteristics except :-
- a) surviving
  - b) reproduction
  - c) death
- 12- Bats sleep and its head .....
- a) Up
  - b) upside down
  - c) high
- 13- Activity of bats increases at .....
- a) Day time
  - b) night time
  - c) afternoon
- 14 - Bats depend on ..... to locate a position
- a) memory
  - b) to see
  - c) echo

15- The color of the fur of polar fox is.....

- a) Brown
- b) white
- c) grey

16- The funk fox live in ..... Environment

- a) Hot
- b) very hot
- c) cold

17- From the problem that effect on the life of living organisms .....

- a) Temperature (heat)
- b) shortage of water
- c) all the previous answer

18- Lizard protects its body temperature by .....

- a) drinking a lot of water
- b) hide in shadow areas
- c) swimming a lot

19- ..... is the change that occur over time that help animals to survive

- a) Running
- b) swimming
- c) adaptation

20- Lizard has colorful scales that help it to .....

- a) Hide from enemies
- b) grow fast
- c) increasing its activity

21- The yellow fur for funk fox helps it to hide in .....

- a) Snow
- b) desert
- c) forest

22- Funks depend on panting to .....

- a) Hide from enemies
- b) keep their bodies' cool
- c) eating food

23- Some flower secrete scent to .....

- a) Attract insect towards it
- b) protect itself from eat
- c) To reach water

24- ..... Adapted to live in fresh and salty water

- a) Bull shark
- b) whale
- c) funk fox

25- Lizard protects its body temperature by .....

- a) Stay in shadow areas
- b) drinking a lot of water
- c) sleeping

26- Cactus has spines to .....

- a) Prevent animals from eating it
- b) attract insect to it
- c) absorbs water

27- tan-color coat in fennec fox is considered ..... adaptation

- a) behavior
- b) structure
- c) mutation

28- panting in fennec fox to stay cool is considered ..... adaptation

- a) behavior
- b) structure
- c) mutation

29- extra-large ears allow heat to escape to cool the bodies of ..... foxes

- a) arctic
- b) fennec
- c) arctic and fennec

30- a burrow is an excellent place for the ..... Fox to stay warm at night

- a) arctic
- b) fennec
- c) arctic and fennec

31- the change of bull shark to find a prey is more easier in ..... Water

- a) fresh
- b) salty
- c) lack

32- chameleon puffs its body with air for defense which is considered ..... adaptation

- a) behavior
- b) structure
- c) mutation

33- an animal that has multiple bright colors to provide camouflage in its environment and V-shaped feet.....

- a) fennec fox
- b) panther chameleon
- c) tarsier monkey

34- if a bull shark moves from a river to a sea it will.....

- a) die
- b) still a life
- c) cant hunt easier

35- ..... use one eye for searching for food and the other one to lookout for danger

- a) starred agama lizard
- b) panther chameleon
- c) dolphin

36- changing color of body coat of arctic foxes according to seasons is .....

- a) behavior adaptation
- b) structure adaptation
- c) mutation adaptation

37- when the nearby acacia trees receive the smelly message from the acacia tree which exposed to be eaten by animals they .....

- a) start to lose water from their trunk
- b) start to invite bats to eat their leaves
- c) start to make a poisonous substance in their leaves

38- it's difficult for rainforest plant to get.....

- a) water
- b) wind
- c) sunlight

39- acacia tree trunk and camel hump .....

- a) both store water
- b) the first stores fat and the second stores water
- c) the first stores water and the second stores fat

40- from the structure adaptation of water lily plant is that .....

- a) has long roots
- b) has sharp spines
- c) has wide leaves

41- if a plant grow in a dry desert it needs ..... To adapt for getting water

- a) long branches
- b) long roots
- c) long leaves

42- Barbary fig keeps animals away like acacia trees by its .....

- a) sharp spines
- b) long leave
- c) poison

43- kapok tree use the wind to carry its fluffy yellow seeds across its .....

- a) rainforest habitat
- b) salt water habitat
- c) desert habitat

44- umbrella -shaped tree are .....

- a) mangrove tree and acacia tree
- b) mangrove tree and kapok tree
- c) acacia tree and kapok tree

45- acacia tree and kapok tree used ..... to send message

- a) insect
- b) water
- c) wind

46- plants of dry desert habitat adapted to .....

- a) attract insect
- b) store water
- c) lose water

47- animals can't eat Barbary fig due to its .....

- a) bad taste
- b) sharp spines
- c) poisonous

48- kapok tree has ..... leave

- a) spines
- b) hand-shape
- c) needle

49- a plant lives in salt water habitat and has long strong roots to resist water waves is .....

- a) kapok
- b) water lily
- c) mangrove

50- ..... Of acacia tree that allow it to search for water

- a) trunk
- b) taproot
- c) buttress root

51- acacia tree defending itself by producing .....

- a) delicious smelly
- b) poisonous smelly
- c) fruit

52- water lilies lives in ..... habitat

- a) desert
- b) polar
- c) wet land

53- pine tree live in ..... habitat so they have short braches and needle leaves

- a) hot
- b) snow
- c) rainforest

54- the oxygen gas moves from air into blood at the .....

- a) nose
- b) trachea
- c) lungs

55- the throat is connected to the lungs through .....

- a) esophagus
- b) trachea
- c) ribs

56- meat is much easier to be processed so dogs have .....

- a) more than one stomach and a short digestive system
- b) only one stomach and a short digestive system
- c) more than one stomach and a long digestive system

57- the solid wastes of undigested food become useless to the body so the body must expel it outside the body through the .....

- a) mouth
- b) small intestine
- c) large intestine

58- in the large intestine ..... is absorbed from the undigested food

- a) starch
- b) fats
- c) water

59- the organ that is long winding tube its length is about more than six meters is called .....

- a) large intestine
- b) small intestine
- c) esophagus

60- the stomach mix the food with .....

- a) digestive juice only
- b) stomach acid only
- c) digestive juice & stomach acid

61- the organ that moves the food into the stomach is.....

- a) mouth
- b) tongue
- c) esophagus

62- the role of teeth in digestion process is .....

- a) mixing the food
- b) crushing the food
- c) swallowing the food

63- the digestive system consists of ..... organs that work together

- a) similar
- b) different
- c) weak

64- grass is ..... to be digested

- a) very easy
- b) too hard
- c) sometimes easy and sometimes hard

65- digestive system ends by .....

- a) large intestine
- b) stomach
- c) anus

66- food usually stay in stomach for ..... hours until it become soupy liquid

- a) long
- b) few
- c) 6 hours

67- ..... are from the organ of digestive system

- a) stomach , nose , mouth & large intestine
- b) esophagus, stomach , large intestine & small intestine
- c) mouth , esophagus , trachea & anus opening

68- the inhaled air rich with .....Gas while the exhaled air rich with ..... gas

- a) oxygen , carbon dioxide
- b) carbon dioxide , oxygen
- c) oxygen , nitrogen

69- ..... is a large muscle that contract during breathing in and relax during breathing out

- a) esophagus
- b) diaphragm
- c) two lungs

70- the organ in which saliva is secreted is .....

- a) mouth
- b) nose
- c) trachea

71- liquid secreted in your mouth that bite the food is .....

- a) gastric
- b) saliva
- c) intestinal

72- the organ which receives the food from esophagus is .....

- a) large intestine
- b) small intestine
- c) stomach

73-the organ through which the solid wastes leaves the body is .....

- a) anus
- b) small intestine
- c) liver

74- the wall of the small intestine absorbed the digested food into your bloodstream through .....

- a) blood
- b) blood vessels
- c) anus opening

75- cows have ..... stomach for digestion of grass

- a) one
- b) three
- c) four

- 76- during inhalation process the diaphragm muscle contract and move .....
- a) up
  - b) down
  - c) up then down
- 77- during inhalation air travel down from your throat to your lungs through...
- a) trachea
  - b) esophagus
  - c) mouth
- 78- fish uses ..... To breach in water
- a) tail
  - b) eyes
  - c) gills
- 79- gills differ from lungs in that gills .....
- a) extract oxygen gas from water
  - b) extract oxygen gas from air
  - c) expel out carbon dioxide gas
- 80- the change that occurs to the environment .....
- a) causes many organisms to die
  - b) give a chance to the organisms for adaptation
  - c) cause many organisms to respire
- 81- human activities and bad habitats can pollute ..... of the ecosystem
- a) air and water only
  - b) air , soil and water
  - c) soil and water only
- 82- pollution of ecosystem can affect .....
- a) plants and animals only
  - b) animals and human only
  - c) plants , animals and human
- 83- if an ecosystem is severely polluted some animals can survive .....
- a) by moving to another suitable ecosystem
  - b) by decreasing the rate of breathing
  - c) by increasing the rate of breathing

- 84- human can help restoring ecosystem by all the following activates except
- a) replanting the cleared forested
  - b) removing air and water pollutants
  - c) producing more factories exhaust
- 85- wildfire is most dangerous for plants rather than animals because .....
- a) plants can grow rapidly
  - b) plants can't move at all
  - c) animals can grow easily
- 84- both of lungs and gills take ..... Gas inside the body and release ..... oxygen gas outside the body
- a) must have butters roots
  - b) must land their seeds in anther better place
  - c) must have a taproot
- 85- when an ecosystem is slowly changed many organisms may.....
- a) die
  - b) survival
  - c) extinct
- 86- ..... are unique physical adaptation that allow fish to live and breath under water
- a) lungs
  - b) gills
  - c) trachea
- 87- ..... is a natural change that causes burn of forest trees and grasslands
- a) floods
  - b) wildfires
  - c) drought
- 88- ..... Is a human activity done to obtain wood from making furniture
- a) planting trees
  - b) cutting down trees forest
  - c) burning wood

89- one of air pollution that makes human hard to breath is .....

- a) asthma
- b) smog
- c) winds

90- when air pollutant that makes human hard to breath is .....

- a) asthma
- b) stomach-ash
- c) heart problems

91- building new communication may cause many organisms to .....

- a) disappear
- b) increases their number
- c) increases oxygen gas

92- both human and amphibians breathe in oxygen which of the following sentence is correct?

- a) both can breathe oxygen gas from water
- b) both can take in oxygen gas through skin
- c) humans can breathe oxygen gas from water and air

93- amphibians live in ..... that suits its adaptation

- a) dry environment
- b) moist environment
- c) arctic environment

94- amphibians can take in oxygen in gas from .....

- a) water only
- b) air only
- c) water and air

95- golden frog and polar bear ,.....

- a) both are living organism
- b) both can breathe in water
- c) both live in the same habitat

96- to increase the number of an endangered species you may have to .....

- a) introduce a new prey for this species
- b) introduce a plant that cause harm for this species

c) introduce a disease that cause death for this species

97- blood vessels that carry oxygen gas in amphibians present in .....

a) skin and digestive system

b) lungs and eyes

c) skin and lungs

98- amphibians includes frog , salamanders and .....

a) starred agama

b) snake

c) toads

99- the number of amphibians ..... in the last few years due to restoring the ecosystem

a) increases

b) decreases

c) doesn't change

100- amphibians may suffer from habitat loss or even die if the ecosystem is .....

a) transferred

b) full of pollution

c) become comfortable

### Final Revision Concept 2:

#### Choose the correct answer:-

1- the sensory organs of the dolphin helps it to do all the following except ....

a) survival

b) searching for food

c) searching for water

2- to describe the delouse taste of ice-cream we should use the sense of .....

a) sight

b) taste

c) smell

3- the five sensation organs are .....

- a) sight, hearing , touch , smell and movement
- b) sight, hearing , touch , smell and taste
- c) digestion , hearing , touch , smell and movement

4- we can distinguish by gold and silver by ..... sense

- a) taste
- b) smell
- c) sight

5-the human can identify different type of music by ..... sense

- a) smelling
- b) hearing
- c) touching

6- the Egyptian mongoose can communicate with its species by making .....

- a) bad smell
- b) contrast shading
- c) sounds

7- skin is a ..... that help human to feel the hotness of cup of tea

- a) sensory receptors
- b) sensory organs
- c) small organ

8- the chameleon is one of the reptile that uses its tongue to ..... the food

- a) smell
- b) taste
- c) feel

9- .....a property done by the dolphin when the sound hits object under water

- a) echolocation
- b) contrast shading
- c) sense of heat

10- the organ used to differentiate between different colors is .....

- a) nose
- b) skin
- c) eyes

11- the organ used to differentiate between different scents is .....

- a) nose
- b) skin
- c) eyes

12- owl uses sense of ..... And ..... in hunting prey

- a) smell and sight
- b) hearing and smell
- c) sight and hearing

13- a human can pay attention to an alarm bell through sense of .....

- a) hearing
- b) smelling
- c) tasting

14- dolphin have sharp sense of .....

- a) hearing
- b) smelling
- c) tasting

15- a human can distinguish the taste of coffee by using the organ.....

- a) tongue
- b) skin
- c) mouth

16- the dog uses its ..... To identify its owners scent

- a) eyes
- b) nose
- c) skin

17- the fox uses its ..... And ears to run when it sees or hears its enemies

- a) nose
- b) eye
- c) skin

18- the electrical impulses that transmit information from the surrounding environment through nerves are .....

- a) in one direction only to the brain
- b) in one direction only from the brain

c) in the two opposite direction to the brain then from it

19- owls have all the following properties that give them greatest ability to sense distant prey making low sounds except.....

- a) weak sense of heat
- b) large eyes
- c) a bowl-shaped face

20- a snake can sense warm bodies of prey at night using .....

- a) special part of its tail
- b) special part of its face
- c) special part of its back

21- both bats and mosquito becomes active during night which of the following statements is correct?

- a) both can swim well
- b) both can run fast
- c) bats preys on a mosquito

22- some animals go out at night in their habitats to .....

- a) search for a prey
- b) search for a predator
- c) search for air

23- the brain as the control center of the nervous system can deal with .....at the same time

- a) two senses only
- b) three senses only
- c) the five senses

24- if you enter you home and smell of pizza , the first part of your body that receive this smell is .....

- a) sensory receptors in the ears
- b) sensory receptors in the mouth
- c) sensory receptors in the nose

25- the organ that processing the information collected through the sense of sight is .....

- a) nerves
- b) brain
- c) spinal cord

26- the nerves transmit information from and to the brain in the form of .....

- a) magnetic impulses
- b) electrical impulses
- c) light impulses

27- both the spinal cord and nerves.....

- a) located at the backbone
- b) transmit message from the brain to all parts of the body
- c) transmit message from the brain to all parts of the body and vice versa

28- animals that are called nocturnal animals are active at .....

- a) day time
- b) night time
- c) both day and night

29- some animals have abilities that humans do not have and theses abilities are called .....adaptation

- a) normal
- b) behavior
- c) super sensory

30- a bat can locate the place of the prey by .....

- a) smelling its
- b) echo location
- c) tasting

31- snake has the ability to sense the ..... bodies of prey by a special part in its face

- a) heat
- b) cold
- c) poisonous

32- an animals that can turns its head backward and have a bowl-shape face

- a) parrot
- b) owl
- c) squirrel

33- the organ that responsible for processing information transmitted to it and then send message to the sensory organs

- a) spinal cord
- b) nerves
- c) brain

34- a type of nerves in the sensory organs that responsible for receiving information from the environment

- a) nervous system
- b) nerve cell
- c) sensory receptors

35- if you saw a lion you have received the information through the sensory receptors in your .....

- a) nose
- b) eye
- c) ear

36- when a jerboa hears the sound of snake it .....

- a) make sound to frighten the snake
- b) jumps quickly away from the snake
- c) remains standing in its place

37- when your hand touch a fire , you move your hand in .....

- a) less than one sec
- b) two minute
- c) one minute

38- during crossing the road , you had to stop for a moment , the system that warned you was .....

- a) digestive
- b) respiratory
- c) nervous

39- the Egyptian jerboa lives in .....

- a) forest
- b) polar areas
- c) desert

40- the Egyptian jerboa jumps in ..... form to run from enemies

- a) straight pattern
- b) zigzag pattern
- c) curved pattern

41- the habitat of the Egyptian jerboa is ..... to the polar bear

- a) different
- b) equal
- c) sometimes equal

42- the time taken by an organisms body to different reactions around it.....

- a) reaction time
- b) fun time
- c) night time

44- The presence of hair on the jerboa feet and toes to.....

- a) help it catch sand when it jumps
- b) catch on snow
- c) dance in all direction

45- The Egyptian jerboa has long ..... to jump for a long distance

- a) front legs
- b) hind legs
- c) short arms

46- The shorter the reaction time ,the .....

- a) faster the prey can run away
- b) faster the predator can catch the prey
- c) longer the time taken by the prey to detect the presence of a predator

47- brain can explain what you see faster than what you hear because.....

- a) visual reaction time is less than auditory time
- b) visual reaction time is the same as auditory reaction
- c) visual response is faster than auditory response

48- Sensory receptors ,brain and nerves .....

- a) they work separately from each other
- b) they work together with each other
- c) only the brain works individually

48- when you hear a fire alarm and smell a smoke odour, all of the following play a role such that a person can survive and run away from this place except.....

- a) sensory receptors in the nose and eyes
- b) nerves , spinal cord and brain
- c) digestive system

49- the body can respond to..... one external stimuli at the same time

- a) less than
- b) more than
- c) equal to

50- the response to a danger begins with .....

- a) sensory receptors
- b) brain
- c) spinal cord

51- reaction time should be as ..... as possible

- a) short
- b) long
- c) too long

52- visual reaction time ..... from one species to another

- a) same
- b) different
- c) sometimes same

53- ..... is considered the linkage between the eye ,brain and hand when sending information to hold a stick as it falls

- a) brain
- b) sensory organs
- c) nerves

54- the response of the eye nerve is ..... that of the ear nerves

- a) less than
- b) greater than
- c) equal to

55- blinking your eye quickly when something come close to it represents .....

- a) reflex action
- b) camouflage
- c) countershading

56- when you sense the thunder and lightning you depends on .....

- a) sight and smell
- b) sight and hearing
- c) sight and touch

57- the ..... carry information from sensory organs to the brain in the form of electrical pulses

- a) bone
- b) sensory receptors
- c) blood

58- ..... In your finger can distinguish between smooth and rough

- a) bone
- b) muscle
- c) sensory receptors

59- ..... organ can distinguish between good and bad outer

- a) ear
- b) nose
- c) hand

60- the sense of ..... can recognize the sour taste of lemon

- a) hearing
- b) smelling
- c) tasting

61- a type of wave that can transferee from your ears to your brain is .....

- a) light waves
- b) sound waves
- c) electric wave

**Complete:**

1. Desert lizards keep their bodies cool by looking for ..... during very hot times
2. The fennec fox lives in .....
3. Types of adaptation are ..... and .....
4. The habitat for arctic fox is.....

**Choose:**

1. The problems which affect the survival of organisms .....
  - a. High or low temperature      b. no water
  - c. Lack of food                      d. all of them
2. Penguins live in .....
  - a. The desert      b. Antarctica      c. rivers      d. savannah forests
3. One of the reasons that the living organisms adapted .....
  - a. Climate      b. forests fires      c. earthquakes      d. Pollutions
4. Panther chameleon has ..... to hide among the green leaves and flowers
  - a. Long tail      b. colored scales      c. shape feet      d. the eyes
5. The fennec fox has sandy fur to .....
  - a. Run fast in the desert      b. to warm      c. hide in the desert      d. no answer

9. An animal that has the ability to hide in the desert

- a. Caracal cat    b. fennec fox    c. desert lizard    d. all of them

10. **Fennec Fox** has (short ears—long ears—tongue) to get rid of excess heat

### True and false

1. Penguins live in a polar climate in Antarctica. (    )
2. The fennec fox live in Tundra. (    )
3. The polar bear has thick white fur to warm and hide. (    )
4. Structural adaptation is a change in the behavior of animals (    )
5. Bull shark can live in a salty water only. (    )
6. Starred agama lizard searches for shaded area in the desert. (    )

### (1) Put (✓) or (X)

1. Living organisms can adapt their environmental conditions through structural adaptation and behavioral adaptation. (    )
2. Fennec foxes and polar bears are similar in keeping their bodies Cool through panting. (    )
3. When the snow melts in polar regions, the thick fur coat of arctic foxes turns black. (    )
4. The ears of arctic foxes are larger than that of fennec foxes. (    )
5. Fennec foxes stay in burrows. (    )

6. Both fennec and arctic foxes can eat insects, fruit, plant roots.

(    )

7. All types of sharks live in fresh water.

(    )

8. Chameleon uses its V-shaped feet to hunt and move. (    )

9. Panther chameleon has teeth and claws, through which it can hunt and eat its prey.

(    )

10. The panther chameleon has a very long sticky tongue to hunt insects for feeding.

(    )

11. Starred agama lizard use one of its eyes for searching for food and the other one to lookout for danger.

(    )

12. The polar bear survives and reproduce in the same habitat of panther chameleon. (    )

### **Write the scientific term :**

1) It is a change in the behaviors or acts of a group of animals to adapt its environment. ....

2) A type of foxes that has sandy-colored fur to adapt its desert environment. ....

3) In bull shark, the lower surface of its body is .....

4) . It covers the body of some type of bears to blend in with snow and keeps its body warm .....

5) An animal that has a layer of fat and thick downy feathers to adapt extreme cold weather is .....

**Put (√) or (x):**

- 1) The insulating layer of fat and the thick downy feathers trap Warm air. ( )
- 2) The ears of arctic foxes are larger than that of fennec foxes. ( )
- 4) . Penguins can adapt to live in extreme cold environment by Having long ears. ( )
- 5) Polar bear has a dark fur to blend in with the snow. ( ) 6) The blood vessels coming **upwards** from the penguin's feet carry warm blood. ( )

**Complete:-**

- 1) Eyes of chameleon move in opposite direction , this adaptation is considered as ..... adaptation.
- 2) The fur of a polar bear is thick to keep its body ..... .. in polar climate, while it has.. .... color to blend in with snow.
- 3) Weaving of vessels around each other in penguin's feet is Considered .....adaptation.

**Choose the correct answer:**

1. Panting in fennec foxes belongs to .....adaptation
  - a. Only structural
  - b. Only behavioral
  - c. Both structural and behavioral
  - d. Neither structural nor behavioral

2. When a panther chameleon stands within leaves of trees, the color of its scales changes into .....color

- a. white
- b. green
- c. blue
- d. black

3. All of the following properties are considered as structural adaptations in the panther chameleon except its .....

- a. Each eye can move in opposite direction
- b. Opening its mouth wide during danger
- c. V-shaped feet
- d. Long sticky tongue

4. All of the following properties protect acacia leaves from being eaten by animals except that.....

- a. They are high enough
- b. They are guarded by sharp spines
- c. They are brightly colored
- d. They produce a poison

5. If a plant grows in a dry desert , it needs .....to adapt for getting water

- a. Long branches
- b. Long leaves
- c. Long roots
- d. More sunlight

6. If a plant grows in a snowy habitat. So, it needs all the following characteristics except .....to adapt to this habitat

- a. Short branches
- b. Triangular shape
- c. Needle leaves
- d. Wide leaves

Write the scientific term of each of the following:

1. A feature in the bull shark, in which the upper surface of its body is darker than its lower surface (..... )
2. Excellent places for arctic foxes to stay warm at night (..... )

Choose the correct answer:

1. Adaptation helps the living organism in all the following characters,

except ..... a. Surviving

- b. Hiding
- c. Reproduction
- d. Death

2. The starred agama lizard keeps cool during a hot sunny day in the desert by.....
- a. Eating green vegetables
  - b. Drinking more water
  - c. Secreting more sweat
  - d. Finding a shade area
3. If you catch a piece of ice in your hand, you will begin to lose feeling in your fingers after a few .....
- a. Minutes
  - b. Days
  - c. Hours
  - d. weeks
4. The presence of an insulating layer of ....., keep the penguin's body warm
- a. Protein and thick downy feathers
  - b. Fat and thin downy feathers
  - c. Fat and thick downy feathers
  - d. Protein and thin downy feathers
5. In penguin's feet, .....weave around each other
- a. Warm blood vessels and cold blood vessels
  - b. Warm blood vessels and its toes
  - c. Cold blood vessels and its toes
  - d. Cold blood vessels and thick downy feathers
6. When we wear heavy clothes in winter, this is considered as a type of .....
- a. Adaptation for cold weather
  - b. Adaptation for hot weather

- c. Camouflage
- d. Ecosystem

7. Camouflage means that the animal .....

- a. Can be seen easily among its surrounding
- b. Is hard to be seen among its surrounding
- c. Is easily to be seen by its preys
- d. Can be seen easily by its predators

8. Fennec fox and Caracal have ..... that help them blend.

- b. Sandy-colored feathers
- c. Thick white fur
- d. Sandy-colored fur

Write the scientific term of each of the following:

1. A property that helps animals to blend in with their surrounding environment.

(..... )

2. An animal that has a layer of fat and thick downy feathers to adapt to extreme cold weather.

(..... )

Complete the sentences:

1. Among animals that can live in polar environments are ..... And

.....

2. In a desert environment, .....and  
.....are covered with sandy-colored fur.

What happens if:

Some types of lizards don't have the camouflage adaptation

.....

Q1:-Choose the correct answer:-

1-From the behavioral adaptation of acacia tree is

a- it has one very long root., and the second stores water.

c- it has sharp spines among its leaves.

d- it has very tall trunk.

e- it producing poison to make a bad tasty leaves.

3-The roots of kapok tree are not planted deeply in the soil,

because .....

a- the soil contains less water.

b- The soil contains more water.

c- the climate is very cold.

4- If a plant grows in a rainforest, where it is hard to reach

sunlight. So, it needs .....to adapt for getting more

sunlight.

a- Small roots

b- A very a tall trunk

c- Sharp spines

5- Desert plants are characterized by all the following except that they .....

a- store water.

b- have wide leaves.

d- have sharp spines.

Q2: Put (✓) or (X):-

1- Animals can't eat Barbary fig due to its sharp spines. ( )

2- Pine trees live in desert habitat, adapt by having needle leaves to prevent losing of water. ( )

3- Mangrove trees adapt to resist the water waves through their long strong leaves. ( )

4- Kapok tree has hand shaped leaves. ( )

Q3: Write the scientific term:-

1- Structural adaptation of acacia tree that allows it to search for water. (.....)

Q2: Complete the following:-

1- Acacia tree defending itself by producing.....that makes leaves taste terrible.

2- The needle leaves of ..... tree in snowy habitat prevent the loss of water.

3- The shape of the kapok leaves allows ..... to flow through them smoothly.